STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget

320 S. Walnut Street 2nd Floor Lansing, MI 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **8**
to
Contract Number **MA210000000877**

CONTRACTOR	
	Global Environmental Consulting, Inc.
	3370 N. Hayden Road
	Scottsdale AZ 85251
	Matthew Guthrie
	602-885-6197
	Matthew.Guthrie@1GEC.com
	VS0101351

STATE			
Program Manager	Various	Various	
Contract Administrator	Jarrod Barron	DTMB	
	517-249-0406		
	Barronj1@michigan.gov		

CONTRACT SUMMARY			
Safe Drinking Water Information System (SDWIS) and Supporting Systems			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
April 28, 2021	April 30, 2026	5 - 12 Months	April 30, 2026
PAYMENT TERMS		DELIVERY TIMEFRAME	
ALTERNATE PAYMENT OPTIONS		EXTENDED PURCHASING	
☐ P-Card ☐ Direct Voucher (PRC) ☐ Other		☒ Yes ☐ No	
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		
CURRENT VALUE	VALUE OF CHANGE NOTICE		ESTIMATED AGGREGATE CONTRACT VALUE	
$3,245,820.35	$0.00		$3,245,820.35	

DESCRIPTION

Effective 6/16/2025, the parties reallocate funds from the Data Validation Tool task, which remains on hold pending further clarity on the GEC SaaS product timeline, to support the following activities: $14,849.14 for continued correction and migration of NC data into the consolidated SDWIS system and $9,170.55 for modifications to the MiLogin authentication process to implement encrypted OIDC (OpenID Connect) authentication.

Further, the parties add the following language to the Contract: "Accessibility Requirements. The State is required to comply with the Americans with Disabilities Act of 1990 (ADA) and has adopted standards and procedures regarding accessibility requirements for websites, applications, content, and electronic documents. Due to a change in the law, the State is required to comply with specific accessibility standards for websites, applications, content and documents. On or before 4/24/2026, and throughout the Term, all websites, applications, software, content, and electronic documents, including but not limited to mobile applications, text, images, sounds, videos, controls, animations, links, and documents (including files in the following formats: PDF, word processing, presentation, and spreadsheet), created, provided, or made available by the Contractor under this Contract related to DWV, RECAP and Data Validator, must comply with WCAG 2.1 Level AA. Further, Contractor must work to achieve SWIFT Surveys compliance as soon as practicable."

All other terms, conditions, specifications and pricing remain the same. Per Contractor, agency, and DTMB Central Procurement approval.

Program Managers

for

Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Dastoli	517-242-4114	DastoliR@michigan.gov

STATEMENT OF WORK – IT Change Notice

Project Title: Contract 210000000877 Change Notice #8 – PWS Data Management Support	Period of Coverage: 6/1/25-12/31/2025
Requesting Department: EGLE	Date: 5/27/2025
Agency Project Manager: Ronda Dastoli	Phone: (517) 242-4114
DTMB Project Manager: Laura Brancheau	Phone: (517) 335-1334

BACKGROUND:

Change Notice 6 included putting efforts on hold for the Data Validation Tool resulting in $118,470.10 contract dollars being available for re-allocation for additional related services.

Efforts to date for the in-scope efforts combining of the Community water System (CWS) and the Noncommunity Water System (NC) programs has been impacted by a number of factors that have required additional time and efforts to resolve. This has included:

- Since the combination project has been delayed, additional data quality issues were discovered that were added since we did our first round of migrations, and some data have not been able to be migrated into SDWIS. Additional clean-up of the data will be needed to get all data into SDWIS. Both EGLE and GEC addressed some of the data clean up items prior to the combination, with the movement of funds from the Data Validator Task to the Combination task. The remaining items where additional funding will be needed include:
  - Fix issue where lead and copper samples are missing a lab reporting level.
  - Fix lead consumer notice schedules, once receive a complete list from EGLE.
  - Clean up missing monthly operating report information once examples of missing data are provided by EGLE.
  - Clean up lead service line inventory schedules once receive complete list from EGLE.
  - Update total coliform sample types so missing results can be migrated to SDWIS, then return to previous sample type.
  - Once scripts are run, GEC will compare databases to identify and help correct any remaining data quality errors.

In addition, the MiLogin integration needs to be updated to use encrypted OIDC (OpenID Connect) authentication. Additional funds are needed to work with the MiLogin team and alter the authentication method.

The financial impact to the project includes:

- Reallocating $14,849.14 from the funds previously designated for the Data Validation tool work—paused in CN#6 until the SaaS product becomes available next fiscal year—to correct remaining data quality errors and migrate the remainder of the NC data into the combined SDWIS database. This task has proven more complex and time-intensive than initially anticipated due to the intricacies of the data sources.
- Similarly, reallocating $9,170.55 from the funds previously designated for the Data Validation tool work to re-authenticate MiLogin using encrypted OIDC (OpenID Connect) authentication protocol.
- The amount remaining in the Data Validator Task is $18,976.02.

This is a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:
The objective of this change notice in relationship to the project is to re-allocate funding made available in Change Notice 6 from putting work on the Data Validation Tool Task on hold to additional efforts for combining the CWS and NC SDWIS database and applications task, and to add a task for MiLogin authentication changes.

SCOPE OF WORK:
The change items in this change notice include:
- Additional time needed to correct data quality errors and finish migrating NC data into the combined version of SDWIS.
- Address additional MiLogin changes, and additional check-in meetings to discuss, and test the implementation of the MiLogin authentication changes in test (QA) and production environments.

Change Item 1 (AKA Task 1)

Description: Additional time is needed to continue correcting and migrating NC data into the combined version of SDWIS.

Target Due Date: Changed from 5/31/2025 to 7/31/2025.

Impact: No change to the contract funding level is anticipated. This change notice moves funding within the contract. Moves $14,849.14 from the Data Validation tool task to the combining task equates to 100 labor hours at the 2025 SME 3 rate of $148.49.

Planned contractor effort includes:
- 15 hours to write additional scripts to update SDWIS data.
- 55 hours for data migration and QA of migrated data.
- 15 hours for check-in calls and documentation.
- 15 for additional QA checks and data corrections.

Change Item 2 (AKA Task 2)

Description: Adds a task to change the MiLogin authentication method to encrypted OIDC (OpenID Connect) authentication.

Target Due Date: 12/31/2025.

Impact: No change to the contract funding level is anticipated. This change notice moves funding within the contract. Move funding from the Data Validation Tool to change the MiLogin authentication method to OIDC. This assumes 20 hours will be needed at the 2025 SME 3 rate, 20 hours at the Developer 3 rate, and 20 hours at the Senior Project Manager rate will be needed, for a total of $9,170.55.

Planned contractor effort includes:
- 20 labor hours at the 2025 SME 3 rate for coordination with the client, user acceptance testing, and documentation.
- 20 hours at the 2025 Developer 3 rate for the enhancement and QA testing.
- 20 hours at the 2025 Senior Project Manager rate for the enhancement, coordination with the client and developers, and QA.

DELIVERABLES:
Deliverables will not be considered complete until the Agency Project Manager has formally accepted them.

Tasks	
Deliverable Name	**Description**
MiLogin Authentication Method Change	Change the authentication method for MiLogin to OIDC

ACCEPTANCE CRITERIA:

No change in acceptance criteria from Change Notices 2, 3, 4, 5, 6, and 7.

PROJECT CONTROL AND REPORTS:
No changes to the contract as it relates to<PROJECT CONTROL AND REPORTS>.

SPECIFIC DEPARTMENT STANDARDS:
No changes to the contract as it relates to <SPECIFIC DEPARTMENT STANDARDS>.

PAYMENT SCHEDULE:
No changes to the payment terms and conditions are expected with this Change Notice.

No change in the contract cost is anticipated as a result of Change Notice 8. See the payment table below:

Costs Removed from Data Validation Tool				
Change Item No.	**LOE**	**Labor Cost**	**Other Direct Costs**	**Total Labor Cost and ODCs**
Change Item 1	100.00	$14,849.14	$0.00	$14,849.14
Change Item 2	80.00	$9,170.55	$0.00	$9,170.55
Amount removed from the Data Validation Tool Task	0.00	0.00	-$24,019.70	-$24,019.70
Amount remaining in the Data Validation Tool Task			**$18,976.02**	**18,976.02**
Total Change in Contract Value	**180.00**	**$24,019.70**	**-$24,019.70**	**$0.00**

EXPENSES:
No changes to the contract as it relates to <EXPENSES>.

PROJECT CONTACTS:
No changes to the contract as it relates to <PROJECT CONTACTS>.

AGENCY RESPONSIBILITIES:
No changes to the contract as it relates to <AGENCY RESPONSIBILITIES>.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:
No changes to the contract as it relates to <LOCATION OF WHERE THE WORK IS TO BE PERFORMED>

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:
No changes to the contract as it relates to <EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS>

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget

320 S. Walnut Street 2nd Floor Lansing, MI 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **7**
to
Contract Number **MA210000000877**

<table>
<tr><td rowspan="7">CONTRACTOR</td><td>Global Environmental Consulting, Inc.</td></tr>
<tr><td>3370 N. Hayden Road</td></tr>
<tr><td>Scottsdale AZ 85251</td></tr>
<tr><td>Matthew Guthrie</td></tr>
<tr><td>602-885-6197</td></tr>
<tr><td>Matthew.Guthrie@1GEC.com</td></tr>
<tr><td>VS0101351</td></tr>
</table>

<table>
<tr><td rowspan="6">STATE</td><td rowspan="3">Program Manager</td><td>Various</td><td>Various</td></tr>
<tr><td></td><td></td></tr>
<tr><td></td><td></td></tr>
<tr><td rowspan="3">Contract Administrator</td><td>Jarrod Barron</td><td>DTMB</td></tr>
<tr><td>517-249-0406</td><td></td></tr>
<tr><td>BarronJ1@michigan.gov</td><td></td></tr>
</table>

CONTRACT SUMMARY

Safe Drinking Water Information System (SDWIS) and Supporting Systems

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
April 28, 2021	April 30, 2026	5 - 12 Months	April 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ Direct Voucher (PRC)	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE	
$3,245,820.35	$0.00	$3,245,820.35	

DESCRIPTION

Effective 4/24/2025, the parties add and remove the services detailed in the attached PWS Data Management Support statement of work. This is a zero-dollar change, reallocating existing contract funds. All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Dastoli	517-242-4114	DastoliR@michigan.gov

STATEMENT OF WORK – IT Change Notice

Project Title: Contract 210000000877 Change Notice #7 – PWS Data Management Support	Period of Coverage: 1/1/25-5/31/2025
Requesting Department: EGLE	Date: 4/1/2025
Agency Project Manager: Ronda Dastoli	Phone: (517) 242-4114
DTMB Project Manager: Laura Brancheau	Phone: (517) 335-1334

BACKGROUND:

Change Notice 6 included putting efforts on hold for the Data Validation Tool resulting in $118,470.10 contract dollars being available for re-allocation for additional related services.

Efforts to date for the in-scope efforts combining of the Community water System (CWS) and the Noncommunity Water System (NC) programs has been impacted by a number of factors that have required additional time and efforts to resolve. This has included:

- Since the combination project has been delayed, additional data quality issues were discovered that were added since we did our first round of migrations, and some data have not been able to be migrated into SDWIS. Additional clean-up of the data will be needed to get all data into SDWIS. This may take some additional time on GEC's end if MI staff do not have time to address data quality issues. Some of the things we have identified and talked about on our check-in calls include:
    - Ex. LCR Scheduled activity differences in descriptions for the same scheduled activity.
    - Related to the NC reports-a data comment field was being populated inconsistently, so data quality checks need to be run and data corrected more frequently.
    - Migration of many sample results have failed because a less than flag was marked as true, but then there is value in the concentration field.
    - Some samples were rejected because the sampling schedule had been deleted (SDWIS will not accept sample values if there is no sampling schedule for the time period in which the sample was collected).
    - Additional permitted values were added to SDWIS resulting in additional time needed to transform and migrate data.
- Additionally, there were changes requested to the NC reports well after CN 6 was approved in November of last year. Some of these changes were related to data quality errors that had not been addressed or corrected by the NC program.
- Additional web services changes were requested from EGLE and the MiEHDWIS team. Much of these changes were related to the CWS and NC programs also needing to be differentiated in MiEHDWIS or needed to have the ability to filter out some information. Changes to the web services were needed to prepare for combining the SDWIS database.

In addition, the NC program identified the need for additional customization to the SWIFT Surveys so they could more easily be alerted when there is a significant deficiency reported by a local health department during a sanitary survey. This will allow the central NC program staff to have better oversight of the sanitary surveys conducted and ensure quick follow up after a significant deficiency is identified to ensure that deficiencies are addressed and resolved in a timely manner. This change to SWIFT is estimated to cost $8,967.03.

The financial impact to the project includes:
- Reallocating $66,507.35 from the funds previously designated for the Data Validation tool work—paused in CN#6 until the SaaS product becomes available next fiscal year—to complete the integration of CWS and NC instances of SDWIS. This task has proven more complex and time-intensive than initially anticipated due to the intricacies of the data sources.
- Similarly, reallocating $8,967.03 from the funds previously designated for the Data Validation tool work to customize SWIFT Surveys.
- The amount remaining in the Data Validator Task is $42,995.72.

This is a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:
The objective of this change notice in relationship to the project is to re-allocate funding made available in Change Notice 6 from putting work on the Data Validation Tool Task on hold to additional efforts for combining the CWS and NC SDWIS database and applications task, and to add a task for SWIFT Surveys Customization.

SCOPE OF WORK:
The change items in this change notice include:
- Additional time needed to troubleshoot and investigate data quality errors and changes in the way SDWIS is used by the programs so data can be successfully combined in one version of SDWIS.
- Additional time to change queries, data transformation queries, and time to migrate changes to fix data quality issues is needed.
- Since the project has been extended, check-in meetings with EGLE staff are needed to ensure data quality issues have been addressed.
- Address additional web service changes needed due to the combined databases, and additional check-in meetings to discuss and review the changes is also needed.

Change Item 1 (AKA Task 1)

Description: Data quality issues were reintroduced since the first migration was completed in July, and additional effort has been needed to investigate and resolve issues before additional data, including sample results, can be migrated. Some changes were requested after Change Notice 6 (listed above in the Background section), so the extra effort is accounted for in this task.

Target Due Date: No change from due date of 5/31/2025.

Impact: No change to the contract funding level is anticipated. This change notice reallocates funding within the contract. Reallocating $66,507.35 from the Data Validation tool task to the combining task equates to 448.5 labor hours, with 440 hours at the 2025 SME 3 rate of $148.49 and 8.5 hours at the 2025 Developer 3 rate of $ 137.78.

Planned contractor effort includes:
- 60 hours for additional QA checks and data corrections prior to the final combination
- 20 hours for check-in calls and documentation
- 20 hours for coordination with the Environmental Protection Agency over Federal reporting data
- 348.5 hours for data migration between the databases

Change Item 2 (AKA Task 2)

Description: Adds a task to add a notification to SWIFT surveys where significant deficiencies are identified so that EGLE NC program staff are able to quickly see and follow up with LHD staff whenever significant deficiencies are identified during a sanitary survey.

Target Due Date: 12/31/2025.

Impact: No change to the contract funding level is anticipated. This change notice moves funding within the contract. Move funding from the Data Validation Tool to add a new task to add a notification to SWIFT Surveys for Michigan. This assumes 30 hours will be needed at the 2025 SME 3 rate, and 30.75 hours at the Developer 3 rate will be needed, for a total of $8,967.03

Planned contractor effort includes:
- 30 labor hours at the 2025 SME 3 rate for coordination with the client and user acceptance testing.
- 32.75 hours at the 2025 Developer 3 rate for the enhancement and QA testing.

DELIVERABLES:
Deliverables will not be considered complete until the Agency Project Manager has formally accepted them.

Tasks	
Deliverable Name	**Description**
Custom Notification in SWIFT Surveys	Create a custom notification in SWIFT Surveys

ACCEPTANCE CRITERIA:

No change in acceptance criteria from Change Notices 2, 3, 4, 5, and 6.

PROJECT CONTROL AND REPORTS:
No changes to the contract as it relates to<PROJECT CONTROL AND REPORTS>.

SPECIFIC DEPARTMENT STANDARDS:
No changes to the contract as it relates to <SPECIFIC DEPARTMENT STANDARDS>.

PAYMENT SCHEDULE:

No changes to the payment terms and conditions are expected with this Change Notice.

No change in the contract cost is anticipated as a result of Change Notice 7. See the payment table below:

Costs Removed from Data Validation Tool				
Change Item No.	LOE	Labor Cost	Other Direct Costs	Total Labor Cost and ODCs
Change Item 1	448.5	$66,507.35	$0.00	$66,507.35
Change Item 2	62.75	$8,967.03	$0.00	$8,967.03
Amount removed from the Data Validation Tool Task	0.00	0.00	-$75,474.38	-$75,474.38
Amount remaining in the Data Validation Tool Task			**$42,995.72**	**$42,995.72**
Total Change in Contract Value	**511.25**	**$75,474.38**	**-$75,474.38**	**$0.00**

EXPENSES:
No changes to the contract as it relates to <EXPENSES>.

PROJECT CONTACTS:
No changes to the contract as it relates to <PROJECT CONTACTS>.

AGENCY RESPONSIBILITIES:
No changes to the contract as it relates to <AGENCY RESPONSIBILITIES>.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:
No changes to the contract as it relates to <LOCATION OF WHERE THE WORK IS TO BE PERFORMED>

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:
No changes to the contract as it relates to <EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS>

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget

320 S. Walnut Street 2nd Floor Lansing, MI 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **6**
to
Contract Number **MA210000000877**

	CONTRACTOR			STATE		
	Global Environmental Consulting, Inc.		Program Manager	Various	Various
	3370 N. Hayden Road				
	Scottsdale AZ 85251				
	Laurie Potter		Contract Administrator	Jarrod Barron	DTMB
	603-397-7838			517-249-0406	
	Laurie.Potter@1gec.com			BarronJ1@michigan.gov	
	VS0101351				

CONTRACT SUMMARY			
Safe Drinking Water Information System (SDWIS) and Supporting Systems			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE**
April 28, 2021	April 30, 2026	5 - 12 Months	April 30, 2026
PAYMENT TERMS		**DELIVERY TIMEFRAME**	

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ Direct Voucher (PRC)	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☐		☐		
CURRENT VALUE	**VALUE OF CHANGE NOTICE**		**ESTIMATED AGGREGATE CONTRACT VALUE**	
$3,135,080.27	$110,740.08		$3,245,820.35	

DESCRIPTION
Effective 2/6/2025, the parties add $110,740.08 for the services detailed in the attached PWS Data Management Support statement of work. All other terms, conditions, specifications, and pricing remain the same. Per contractor, agency, and DTMB Central Procurement approval. Internal State Note: Remaining Ad Board funds after this CN: $63,064.41.

Program Managers

for

Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Page	517-242-4114	PAGER1@michigan.gov

STATEMENT OF WORK – IT Change Notice

Project Title: Contract 210000000877 Change Notice #6 – PWS Data Management Support	Period of Coverage: 12/1/24-5/31/24
Requesting Department: EGLE	Date: 11/6/2024
Agency Project Manager: Ronda Dastoli	Phone: (517) 242-4114
DTMB Project Manager: Laura Brancheau	Phone: (517) 335-1334

BACKGROUND:
This change notice extends the expected date to combine the Community Water System (CWS) and the Noncommunity Water System (NC) Programs' instances of SDWIS, and Global Environmental Consulting's (GEC's) applications into one version, and provides updated pricing on maintaining two separate versions of SDWIS and GEC applications through May 31, 2025. This is a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:
The objective of this change notice in relationship to the project is to extend the date to combine versions of SDWIS and GEC applications, and to provide updated pricing in relation to the project extension through 4/30/25.

SCOPE OF WORK:
The change items in this change notice include:
- Change the completion date for combining CWS and NC instances of SDWIS from 11/30/24 to 5/31/2025 and add labor hours to the contract.
- Change the completion date for combining CWS and NC instances of RECAP-Reports, RECAP-Dashboard, SWIFT Surveys, and DWV from 11/30/24 to 4/30/2025.
- Change the target end dates, assisting with the LIMS, from 11/30/24 to the end of the project 5/31/2025.
- Provides implementation/licensing costs for Data Validator instead of a custom project and provides a credit to MI for costs already invoiced on the project.

Change Item 1 (AKA Task 1)

Description: Combine two versions of SWIFT Surveys into one version.

Target Due Date: Changed from 11/30/2024 to 4/30/25.

Impact: Combining the CWS and NCWS SDWIS databases will allow SDWIS administrative tasks to be consolidated between the two units, as well as federal reporting efforts to EPA.

- Includes five months of Year 3 pricing for the CWS Program for SWIFT Surveys for up to 100 users from 12/1/2024 through 4/30/25 or $25,270.83, to be invoiced monthly ($5,054.17 per month).
- Includes five months of Year 3 pricing for the CWS Program for SWIFT Surveys for up to 120 users from 12/1/24 through 4/30/25 or $29,985.04, to be invoiced monthly ($5,997.01 per month)
- Results in a total increase to the contract of $12,516.78.

Change Item 2 (AKA Task 2)

Description: Combine two versions of RECAP-Reports into one version.

Target Due Date: Changed from 11/30/2024 to 4/30/2025.

Impact:
- Includes five months of Year 4 pricing for the CWS Program for RECAP-Reports for up to 100 users from 12/1/24 to 04/30/25 of $25,585.48, to be invoiced monthly ($5,117.10 per month).
- Includes five months of Year 2 pricing for the NC Program for RECAP-Reports for up to 150 users from 12/1/24 to 4/30/25 of $26,680.30 to be invoiced monthly ($5,336.06 per month).
- Results in a total increase to the contract of $21,942.24.

Change Item 3 (AKA Task 3)

Description: Combine two versions of RECAP-Dashboard and Drinking Water Viewer into one version.

Target Due Date: Changed from 11/30/2024 to 4/30/25.

Impact:
- Includes 5 months of Year 2 pricing for the NC program for RECAP-Dashboard for up to 150 users from 12/1/24 through 4/30/24 of $8,173.59 to be invoiced monthly ($1,634.72 per month).
- Includes 2 months of Year 2 pricing for the CWS program for RECAP-Dashboard for up to 100 users from 12/1/24 through 1/31/25 of $2,739.44 to be invoiced monthly (1,369.72 per month).
- Includes 3 months of Year 3 pricing for the CWS program for RECAP-Dashboard for up to 100 users from 2/1/25 through 4/30/25 of $4,178.76 to be invoiced monthly ($1,392.92 per month).
- Year 2 pricing for DWV for the NC program from 12/1/24 to 4/30/25 for up to 500 users of $14,358.54 to be invoiced monthly ($2,871.71 per month).
- Includes 2 months of Year 2 pricing for the CWS program for DWV for up to 10 users from 12/1/2024 to 1/31/25 of $3,015.29 to be invoiced monthly ($1,507.65 per month).
- Includes 3 months of Year 3 pricing for the CWS program for DWV for up to 500 users from 2/1/25 to 4/30/25 of $11,038.13 to be invoiced monthly ($3,679.38 per month. If the CWS program elects to not increase the number of users yet, the costs will be reduced accordingly).
- Results in a total increase to the contract of $16,375.61.

Change Item 4 (AKA Task 4)

Description: Update the due date for CN3, Task 1 Combine separate versions of SDWIS/State into one version. The task was delayed by EGLE. This change notice changes the target due date from 11/30/24 to 5/31/2025. The combination is expected to be completed by the end of April 2025, with the month of May set up for any additional testing or corrections that might need to be made. Also adds 400 hours to this task at the SME 3 rate for 2025. This assumes that 50 hours will be used for additional data QA and correction prior to the combination,

Target Due Date: Changed from 11/30/24 to 5/31/2025.

Impact: An additional 400 hours at the 2025 SME 3 rate of $148.49 is requested to cover additional check-in calls, documentation, data quality checks, additional testing, additional migration and rework that will be needed due to the delay in the combination. Results in a total cost increase to the contract of $59,396.57.

This includes the following assumptions:
- 50 hours will be needed for additional QA checks and data corrections prior to the final combination
- 20 hours will be needed for check-in calls and documentation
- 20 hours will be needed for coordination with the Environmental Protection Agency over Federal reporting data
- 20 hours may be needed for any additional web services adjustments that may need to be made because of the combination
- 290 hours will be needed for data migration between the databases

Change Item 5 (AKA Task 5)
Description: Change the due date of the Data Validation Tool (Change Notice 3 Task 6) to 12/31/25 and provide EGLE with Implementation and SaaS pricing for the Data Validation Tool. GEC expects the Data Validation Tool to be ready for the production environment by 12/31/2025.

Target Due Date: Changed from 12/31/2025.

Impact:
- The Data Validator Implementation Fee (License fee) is $48,797.78. GEC has previously invoiced MI EGLE $3,811.44, and will subtract this credit from the Implementation fee, resulting in a total implementation fee of $44,986.34. This fee would be invoiced one time and covers all fees for setting up and configuring the initial data validator instance, and staff training.
- First year of the SaaS for the data validator is expected to be $70,181.21. This could be invoiced monthly from the month MI approves the validator for use in production.
- The total increase to the contract is estimated to be $508.88.

Change Item 6 (AKA Task 6)

Description: Changes the end date of Change Notice 2 Task 2: Transition EGLE LIMS to EDI from 11/30/24 to 5/31/25.

Target Due Date: Changed from 11/30/2024 to 5/31/25.

Impact:
- Changes the end date of the task to 5/31/25.

DELIVERABLES:
Deliverables will not be considered complete until the Agency Project Manager has formally accepted them.

Tasks	
Deliverable Name	**Description**
No new deliverables are anticipated.	

ACCEPTANCE CRITERIA:

No change in acceptance criteria from Change Notices 2, 3, 4, and 5.

PROJECT CONTROL AND REPORTS:
No changes to the contract as it relates to<PROJECT CONTROL AND REPORTS>.

SPECIFIC DEPARTMENT STANDARDS:
No changes to the contract as it relates to <SPECIFIC DEPARTMENT STANDARDS>.

PAYMENT SCHEDULE:
No changes to the payment terms and conditions are expected with this Change Notice.

The total change in contract price as a result of Change Notice 6 is a cost increase of $110,740.08. See the payment table below:

Total Costs for CN 6				
Change Item No.	**LOE**	**Labor Cost**	**Other Direct Costs**	**Total Labor Cost and ODCs**
Change Item 1	0.00	$0.00	$12,516.78	$12,516.78
Change Item 2	0.00	$0.00	$21,942.24	$21,942.24
Change Item 3	0.00	$0.00	$16,375.61	$16,375.61
Change Item 4	350.00	$59,396.57	$0.00	$59.396.57
Change Item 5	0.00	$0.00	$508.88	$508.88
Change Item 6	0.00	$0.00	$0.00	$0.00
Total	**0.00**	**$59,396.57**	**$51,343.52**	**$110,740.08**

EXPENSES:

No changes to the contract as it relates to <EXPENSES>.

PROJECT CONTACTS:

No changes to the contract as it relates to <PROJECT CONTACTS>.

AGENCY RESPONSIBILITIES:

No changes to the contract as it relates to <AGENCY RESPONSIBILITIES>.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:

No changes to the contract as it relates to <LOCATION OF WHERE THE WORK IS TO BE PERFORMED>

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:

No changes to the contract as it relates to <EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS>

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **5**
to
Contract Number **MA210000000877**

CONTRACTOR		STATE		
	Global Environmental Consulting, Inc		**Program Manager** Various	Various
	3370 N. Hayden Road			
	Scottsdale AZ 85251			
	Laurie Potter		**Contract Administrator** Jarrod Barron	DTMB
	603-397-7838		517-249-0406	
	Laurie.Potter@1gec.com		BarronJ1@michigan.gov	
	VS0101351			

CONTRACT SUMMARY

Safe Drinking Water Information System (SDWIS) and Supporting Systems

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
May 1, 2021	April 30, 2026	5 - 12 Months	April 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ Direct Voucher (PRC)	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$3,058,884.77	$76,195.50	$3,135,080.27

DESCRIPTION

Effective 6/24/2024, the parties add $76,195.50 for the services in the attached statement of work, which extends the expected date to combine the Community Water System (CWS) and the Noncommunity Water System (NC) Programs' instances of SDWIS, and Global Environmental Consulting's (GEC's) applications into one version and provides updated pricing on maintaining two separate version of SDWIS and GEC applications through November 2024. All other terms, conditions, specifications, and pricing remain the same. Per Contractor, Agency and DTMB Central Procurement approval. Remaining Ad Board funds after this change notice: $173,804.49.

Program Managers

for

Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Page	517-242-4114	PAGER1@michigan.gov

STATEMENT OF WORK – IT Change Notice

Project Title: **Contract 210000000877 Change Notice #5 – FY24 PWS Data Management Support**	**Period of Coverage:** 5/8/24-11/30/24
Requesting Department: **EGLE**	**Date:** **5/8/2024**
Agency Project Manager: **Ronda Dastoli**	**Phone:** **(517) 242-4114**
DTMB Project Manager: **Laura Brancheau**	**Phone:** **(517) 335-1334**

BACKGROUND:
This change notice extends the expected date to combine the Community Water System (CWS) and the Noncommunity Water System (NC) Programs' instances of SDWIS, and Global Environmental Consulting's (GEC's) applications into one version and provides updated pricing on maintaining two separate version of SDWIS and GEC applications through November 2024. This is a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:
The objective of this change notice in relationship to the project is to extend the date to combine versions of SDWIS and GEC applications, and to provide updated pricing in relation to the project extension through 11/30/2024. This change notice also removes the Power BI task from the scope of work.

SCOPE OF WORK:
The change items in this change notice include:

- Change the completion date for combining CWS and NC instances of SDWIS, RECAP-Reports, RECAP- Dashboard, SWIFT Surveys, and DWV from 6/30/24 to 11/30/24.
- Change the target end dates for the data validation tool, assisting with the LIMS, CMDP, Bi-Directional Data Flow with MiEHDWIS from 6/30/24 to 11/30/24.
- Remove the Power BI task and apply the remaining funds of $8,117.40 to the combining SDWIS database task (both tasks are time and materials tasks, and not fixed price tasks).

Change Item 1 (AKA Task 1)

Description: Combine two versions of SWIFT Surveys into one version.

Target Due Date: Changed from 6/30/24 to 11/30/2024.

Impact: Combining the CWS and NCWS SDWIS databases will allow SDWIS administrative tasks to be consolidated between the two units, as well as federal reporting efforts to EPA.

- Includes the full Year 2 pricing for the CWS Program for SWIFT

Surveys for up to 100 users from 11/1/2023 through 10/31/2024 or $57,727, to be invoiced monthly.

- Some of the costs are estimated as monthly SaaS costs until the CWS and NCWS SWIFT Survey instances are combined starting on 12/1/2024. NC-only costs cover 10/1/2023 through 11/30/2024, for up to 14 months.
- Costs for CWS SWIFT are also provided monthly, until the CWS and NCWS SWIFT Survey instances are combined as of 12/1/2024. CWS-only costs cover 11/1/2023 through 11/30/2024, for up to 13 months.
- Includes 1 month of year 3 pricing for the CWS Program for SWIFT Surveys for up to 100 users for 11/1- 11/30/2024 or $5.054.17.
- Includes only the full Year 2 pricing for the NC Program for up to 120 users (the NC program began SWIFT Surveys after the CWS program) from 10/1/2023 through 9/30/2024, of $81,929.69 to be invoiced monthly.
- Includes 2 months of Year 3 pricing for the NC Program for up to 120 users for two months, from 10/1/2024 through 11/30/2024 at $11,994.01 to be invoiced monthly.

Change Item 2 (AKA Task 2)

Description: Combine two versions of RECAP-Reports into one version.

Target Due Date: Changed from 6/30/24 to 11/30/2024.

Impact:

- Includes 6 months of Year 4 pricing for the CWS program from 6/1/24 through 11/30/24 or $29,808.33 to be invoiced monthly.
- Includes 8 months of Year 2 pricing for the NC program from 4/1/24 through 11/30/24 or $41,216.46 to be invoiced monthly.

Change Item 3 (AKA Task 3)

Description: Combine two versions of RECAP-Dashboard and Drinking Water Viewer into one version.

Target Due Date: Changed from 6/30/24 to 11/30/2024.

Impact:

- Continuation of Year 1 price for the NC program for RECAP-Dashboard for 7/1/24 through 8/30/24 of
- $2,870.84 to be invoiced monthly.
- Year 2 pricing for the NC program for RECAP-Dashboard for 9/1/24 through 11/30/24 of $4,374.16 to be invoiced monthly.
- Year 2 pricing for the CWS program from 3/1-11/30/24 of $12,327.47 to be invoiced monthly.
- Year 2 pricing for DWV for the NC program from 3/1/24 to 11/30/24 of $25,845.38 to be invoiced monthly.
- Year 2 pricing for DWV for the CWS program from 3/1/24-11/30/24 of

$13,568.82 to be invoiced monthly.

Change Item 4 (AKA Task 4)

Description: Update the due date for CN3, Task 1 Combine separate versions of SDWIS/State into one version. The task was delayed by EGLE. This change notice changes the target due date from 6/30/24 to 11/30/24. No additional LOE is currently expected due to the date change. However, EGLE has indicated that they do not need the Power BI Task. The remaining balance of $8,117.40 has been moved to this task.

Target Due Date: Changed from 6/30/24 to 11/30/24

Impact:

- Total cost for this task is estimated to be $231,142.86 when moving the funds from the Power BI task here.

Change Item 5 (AKA Task 5)

Description: Remove the Power BI Task from Change Notice 3, Task 4 from the scope of work.

Target Due: N/A, task is no longer needed.

Impact:

- Move remaining funds of $8,117.40 from this task to Change Notice 4, Task 4.

Change Item 6 (AKA Task 6)

Description: Change the due date of the Data Validation Tool (Change Notice 3 Task 6) to 11/30/24

Target Due Date: Changed from 6/30/24 to 11/30/24.

Impact:

- Changes the end date of the task to 11/30/24.

Change Item 7 (AKA Task 7)

Description: Changes the end date of Change Notice 2 Task 2: Transition EGLE LIMS to EDI to 11/30/24.

Target Due Date: Changed from 6/30/24 to 11/30/2024.

Impact:

- Changes the end date of the task to 11/30/24.

Change Item 8 (AKA Task 8)

Description: Changes the end date of Change Notice 2 Task 5: EGLE Bi-Directional Data Flow Between SDWIS and MiEHDWIS to 11/30/2024
Target Due Date: Changed from 6/30/24 to 11/30/2024

Impact:

- Changes the end date of the task to 11/30/24.

Change Item 9 (AKA Task 9)

Description: Changes the end date of Change Notice 3 Task 3, CMDP Transition and Implementation to the end of the contract, 4/30/26.

Target Due Date: 4/30/2026
Background: Changes the end date for the CMDP Transition task to the end of the contract, or 4/30/26.

DELIVERABLES:
Deliverables will not be considered complete until the Agency Project Manager has formally accepted them. The only change to deliverables is that the Task 5: Power BI task is being removed from the contract.

Tasks	
Deliverable Name	**Description**
Task 5: Power BI	Removes this task from CN2 Task 4 and moves remaining funding to Task 4: Combine versions of SDWIS/State.

ACCEPTANCE CRITERIA:
No change in acceptance criteria from Change Notices 2, 3, and 4.

PROJECT CONTROL AND REPORTS:
No changes to the contract as it relates to<PROJECT CONTROL AND REPORTS>.

SPECIFIC DEPARTMENT STANDARDS:
No changes to the contract as it relates to <SPECIFIC DEPARTMENT STANDARDS>.

PAYMENT SCHEDULE:
No changes to the payment terms and conditions are expected with this Change Notice. The total change in contract price as a result of Change Notice 5 is $76,195.50. See the payment table below:

Total Costs for CN 5				
Change Item No.	**LOE**	**Labor Cost**	**Other Direct Costs**	**Total Labor Cost and ODCs**
Change Item 1	0.00	$0.00	$11,317.84	$11,317.84
Change Item 2	0.00	$0.00	$31,601.25	$31,601.25
Change Item 3	0.00	$0.00	$33,276.42	$33,276.42
Change Item 4	0.00	$8,117.40	$0.00	$8,117.40
Change Item 5	0.00	-$8,117.40	$0.00	-$8,117.40
Change Item 6	0.00	$0.00	$0.00	$0.00
Change Item 7	0.00	$0.00	$0.00	$0.00
Change Item 8	0.00	$0.00	$0.00	$0.00
Change Item 9	0.00	$0.00	$0.00	$0.00
Total	**0.00**	**$0.00**	**$76,195.50**	**$76,195.50**

EXPENSES:

No changes to the contract as it relates to <EXPENSES>.

PROJECT CONTACTS:

No changes to the contract as it relates to <PROJECT CONTACTS>.

AGENCY RESPONSIBILITIES:

No changes to the contract as it relates to <AGENCY RESPONSIBILITIES>.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:

No changes to the contract as it relates to <LOCATION OF WHERE THE WORK IS TO BE PERFORMED>.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:
No changes to the contract as it relates to <EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS>.

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
320 S. WALNUT ST., LANSING, MICHIGAN 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **4**

to

Contract Number **210000000877**

<table>
<tr><td rowspan="7">CONTRACTOR</td><td colspan="2">Global Environmental Consulting, Inc</td><td rowspan="7">STATE</td><td rowspan="2">Program Manager</td><td>Various</td><td>EGLE</td></tr>
<tr><td colspan="2">3370 N. Hayden Road</td><td></td><td></td></tr>
<tr><td colspan="2">Scottsdale, AZ 85251</td><td rowspan="4">Contract Administrator</td><td>Sarah Platte</td><td>DTMB</td></tr>
<tr><td colspan="2">Laurie Potter</td><td colspan="2">517-219-2406</td></tr>
<tr><td colspan="2">603-397-7838</td><td colspan="2" rowspan="2">plattes3@michigan.gov</td></tr>
<tr><td colspan="2">laurie.potter@1gec.com</td></tr>
<tr><td colspan="2">VS0101351</td><td></td><td></td><td></td></tr>
</table>

CONTRACT SUMMARY

SAFE DRINKING WATER INFORMATION SYSTEM (SDWIS) AND SUPPORTING SYSTEMS

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
May 1, 2021	April 30, 2026	5 - 1 Year	April 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		April 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$2,624,495.77	$434,389.00	$3,058,884.77

DESCRIPTION

Effective 9/28/2023, the parties adds the attached Statement of Work for the purpose of transitioning Michigan's Department of Environment, Great Lakes, and Energy from its current systems to the Compliance Monitoring Data Portal (CMDP) and Safe Drinking Water Information System (SDWIS). This will help prepare for the future migration to EPA's cloud hosted version of SDWIS, prepare data for reporting/dashboard purposes and to purchase and deploy additional GEC applications for managing Public Water Supply (PWS) data. The State also adds $434,389.00 in funding to cover the costs of the work that will be completed.

All other terms, conditions, specifications and pricing remain the same. Per Contractor, Agency, DTMB Central Procurement Services and State Administrative Board approval on 9/28/2023.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Page	517-242-4114	PAGER1@michigan.gov

STATEMENT OF WORK – IT Change Notice

Project Title: Contract 210000000877 Change Notice #4 – FY24 PWS Data Management Support	Period of Coverage: Fiscal Year 2024
Requesting Department: EGLE	Date: 7/7/2023
Agency Project Manager: Ronda Page	Phone: (517) 242-4114
DTMB Project Manager: Laura Brancheau	Phone: (517) 335-1334

BACKGROUND:
Michigan's Department of Environment, Great Lakes, and Energy (EGLE)-Drinking Water and Environmental Health Division (DWEHD) has identified additional Public Water Supply (PWS) program data support needs that can be fulfilled by Global Environmental Consulting (GEC) through a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:
The objective of this change notice in relationship to the project is to seamlessly transition Michigan EGLE from its current systems to the Compliance Monitoring Data Portal (CMDP) and Safe Drinking Water Information System (SDWIS) State in preparation for future migration to EPA's cloud hosted version of SDWIS, prepare data for reporting/dashboard purposes and to purchase and deploy additional GEC applications for managing Public Water Supply (PWS) data.

EGLE's DWEHD currently uses multiple systems for managing Safe Drinking Water Act data:

- SDWIS/State is used for the Community Water Supply (CWS) Program.
- WaterTrack is used for the Noncommunity Water Supply (NCWS) Program, and the NCWS program is in the process of migrating data to a separate version of SDWIS/State.
- WaterChem is a separate database which contains a copy of the State Drinking Water Lab data, as well as Noncommunity data received from private labs which are manually entered into WaterChem via WaterTrack.
- Data for the laboratory certification program are housed in another standalone database.

The change items in this change notice include:
- Replaces two years of SWIFT Surveys costs with revised costs once combining CWS and NC instances of SDWIS and SWIFT.
- Provides updated pricing for combined version of RECAP-Reports, ~~RECEP~~RECAP-Dashboard, and DWV for the remainder of the contract.
- Changes the target end dates for combining the SDWIS databases, training, the data validation tool, the separate reporting database, and the Power BI Views tasks described in Change Notices 2 and 3.
- Recalculates the expected costs for combining the SDWIS databases, assuming all of that work will be conducted in 2024, using the 2024 SME 3 contract rate.
- Adds a task to continue to assist MI EGLE NC with migration from WaterTrack to SDWIS and training for EGLE NC staff and the LHDs.

SCOPE OF WORK:
After the separate instances of the SDWIS CWS and SDWIS NC databases are combined into one instance of SDWIS, this item changes the SaaS costs for SOM for SWIFT Surveys, RECAP-Reports, RECAP-Dashboard, and DWV. GEC will also need to update project documentation for this change, and will need to work with the MiLogin team, and GEC's service provider to ensure that any new IP addresses are whitelisted, for both VPN users in the CWS program, and for the local health departments connecting to SDWIS and SWIFT through the F5.

Change Item 1 (AKA Task 1)

Description: Combine two versions of SWIFT Surveys into one version.

Target Due Date: 6/30/2024

Background: The CWS and NC programs currently maintain two separate SaaS agreements for SWIFT Surveys. This task provides updated pricing for the remaining years of the contract, with one combined SaaS for SOM expected in the last two years of the contract. The CWS Program currently has a SaaS for up to 100 users, and the NC program has a SaaS for up to 150 users. This change notice removes the original contract pricing for SWIFT Surveys for the CWS programs for Years 3 and 4, and creates one SaaS for up to 250 combined users.

GEC Tasks:

Tasks	Effort Estimate (in hours)
SWIFT Surveys SaaS	No change
Update Existing Project Documentation	9
TOTAL	20

Assumptions:
- The change to expected SaaS costs is provided below.
- GEC will need to update project documentation to reflect IP addresses, and remove references to separate versions of SWIFT Surveys.
- Assumes that the entire program will need to have a SaaS for up to 250 users beginning on 7/1/2024.
- Assumes that the original contract amounts for SWIFT CWS Years 3 and 4 are removed from the original contract funding, and replaced with the costs below.
- Note that only 1 year of SWIFT was quoted for the EGLE NC program with Change Notice 2, so additional costs for Year 2 of SWIFT are also included below for FY 24 for the NC program. The costs are estimated as monthly SaaS costs until the CWS and NCWS SWIFT Survey instances are combined as of 7/1/2024. NC-only costs cover 10/1/2023 through 6/30/2024, for up to 9 months.
- Costs for CWS SWIFT for Year 2 are also provided monthly, until the CWS and NCWS SWIFT Survey instances are combined as of 7/1/2024. CWS-only costs cover 11/1/2023 through 6/30/2024, for up to 8 months.

Impact: Combining the CWS and NCWS SDWIS databases will allow SDWIS administrative tasks to be consolidated between the two units, as well as federal reporting efforts to EPA.
- This task will require an additional 9 labor hours and $1,343.64 in labor costs using the SME 3 rate for 2024 for project documentation updates.
- Removes $59,171 for SWIFT Year 3 for the CWS Program, and $55,596 for SWIFT Year 4 for the CWS Program.
- Includes 8 of the 12 months of Year 2 for the CWS Program for SWIFT Surveys for up to 100 users from 11/1/2023 through 6/30/2024 or $38,181.83 (instead of $57,727), to be invoiced monthly.
- Includes only 9 of the 12 months of SWIFT Surveys for up to 120 users for the NC Program for Year 2 of the contract (the NC program began SWIFT Surveys after the CWS program) from 10/1/2023 through 6/30/2024, of $61,447.27 to be invoiced monthly.
- Includes Year 4 SWIFT SaaS pricing for up to 250 users from 7/1/2024 to 6/30/2025 of $102,573.81 to be invoiced on an annual basis.
- Includes only 10 months of Year 5 SWIFT SaaS pricing for up to 250 users from 7/1/25 through 4/30/2026 of $90,606.87 to be invoiced on an annual basis.

Change Item 2 (AKA Task 2)

Description: Combine two versions of RECAP-Reports into one version.

Target Due Date: 6/30/2024

Background: The CWS and NC programs currently maintain two separate SaaS agreements for RECAP-Reports (formerly SWIMR). This task provides updated pricing for one combined SaaS for SOM. The CWS Program currently has a SaaS for up to 100 users, and the NC program has a SaaS for up to 120 users. This change notice removes the original contract pricing for RECAP-Reports for the CWS program for Years 4 and 5 and creates one SaaS for up to 250 combined users.

Assumptions:
- The NC Year 1 SaaS agreement will end at the same time as the CWS Year 3 SaaS agreement ends, so RECAP reports for 5/1/2024-4/30/25 will be invoiced as an annual SaaS, not monthly.
- Assumes that the entire program will need to have a SaaS for up to 220 users beginning on 5/1/2024.
- Assumes that the original contract amounts for RECAP-Reports CWS Years 4 and 5 are removed from the original contract funding, and replaced with the costs below.

Impact:
- Removes $44,210 for RECAP-Reports Year 4 for the CWS Program, and $45,315 for RECAP-Reports Year 5 for the CWS Program, removing a total of $89,525.
- Includes Year 4 RECAP-Reports SaaS pricing for up to 220 users from 5/1/2024 to 4/30/2025 of $70,656.79 to be invoiced on an annual basis.
- Includes Year 5 RECAP-Reports SaaS pricing for up to 220 users from 5/1/2025 to 4/30/2026 of $72,776.49 to be invoiced on an annual basis.

Change Item 3 (AKA Task 3)

Description: Combine two versions of RECAP-Dashboard and Drinking Water Viewer into one version.

Target Due Date: 6/30/24

Background: The CWS and NC programs currently maintain two separate SaaS agreements for RECAP-Dashboard and Drinking Water Viewer. This task provides updated pricing for one combined SaaS for SOM.

The CWS Program currently has a SaaS for up to 10 users for RECAP-Dashboard, and the NC program has a SaaS for up to 15 users to start with. Prices for RECAP-Dashboard were provided in Change Notice 3, and are provided again below. The CWS and NC programs plan to move to a higher level of users once they review the applications and move into production. The numbers used below to calculate costs assume that both programs will move to a combined higher level of users to accommodate their program staff.

GEC Tasks:

Tasks	Effort Estimate (in hours)
RECAP-Dashboard SaaS	0
TOTAL	0

Table A. The SaaS pricing for RECAP−Dashboard (Compliance Manager Dashboard). The yellow highlighted row was used to determine the cost estimates for the combined version of RECAP-Dashboard, and is based on the number of expected RECAP users.

RECAP−Dashboard	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
1-5 users	$10,865.00	$11,136.63	$11,415.04	$11,700.42
6-10 users	$11,395.00	$11,666.63	$11,945.04	$12,230.42
11-15 users	$11,925.00	$12,196.63	$12,475.04	$12,760.42
16-20 users	$12,455.00	$12,726.63	$13,005.04	$13,290.42
21-25 users	$12,985.00	$13,256.63	$13,535.04	$13,820.42
26-50 users	$13,515.00	$13,786.63	$14,065.04	$14,350.42
51-75 users	$15,105.00	$15,376.63	$15,655.04	$15,940.42
76-100 users	$16,165.00	$16,436.63	$16,715.04	$17,000.42
101-125	$17,225.00	$17,496.63	$17,775.04	$18,060.42
126-150	$18,285.00	$18,556.63	$18,835.04	$19,120.42

RECAP–Dashboard	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
151-200	$19,345.00	$19,616.63	$19,895.04	$20,180.42
201-250 users	$20,405.00	$20,676.63	$20,955.04	$21,240.42
251-300 users	$21,465.00	$21,736.63	$22,015.04	$22,300.42
301-350 users	$22,525.00	$22,796.63	$23,075.04	$23,360.42
351-400 users	$23,585.00	$23,856.63	$24,135.04	$24,420.42

Table B. The SaaS pricing for Drinking Water Viewer. The yellow highlighted row was used to determine the cost estimates for the combined version of Drinking Water Viewer.

Authorized Users	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
1-5 users	$16,400.00	$16,810.00	$17,230.25	$17,661.01
6-10 users	$17,220.00	$17,650.50	$18,091.76	$18,544.06
11-15 users	$18,860.00	$19,331.50	$19,814.79	$20,310.16
16-20 users	$19,680.00	$20,172.00	$20,676.30	$21,193.21
21-25 users	$20,500.00	$21,012.50	$21,537.81	$22,076.26
26-50 users	$22,960.00	$23,534.00	$24,122.35	$24,725.41
51-75 users	$24,600.00	$25,215.00	$25,845.38	$26,491.51
76-100 users	$28,700.00	$29,417.50	$30,152.94	$30,906.76
101-500 users	$32,800.00	$33,620.00	$34,460.50	$35,322.01
501-1,000 users	$41,000.00	$42,025.00	$43,075.63	$44,152.52

Assumptions: Assumptions for this task include
- Assumes EGLE NC will start with RECAP-Dashboard in July 2023 with 15 users for testing (costs were included in CN3). Before cutover to SDWIS from WaterTrack, EGLE NC will need 120 users beginning on 10/1/2023.
- Assumes versions of RECAP-Dashboard will be combined by 6/30/24, and that EGLE will need at least 220 users, beginning on 6/1/2024. (GEC pricing is based on user brackets so this will fall between 201-250 users.)
- Assumes EGLE NC will start with DWV in June 2023 with 15 users for testing (costs were included in CN2), and will need 120 users beginning on 10/1/2023.
- Assumes versions of DWV will be combined by 6/30/2024, and that EGLE will need between 501 and 1,000 logged in users, beginning on 7/1/2024.

Impact:
- RECAP-Dashboard SaaS costs for up to 220 users from 7/1/24 to 6/30/25: $20,955.04 to be invoiced on an annual basis.
- RECAP-Dashboard SaaS costs for up to 220 users for 10 months from 7/1/25 to 4/30/26: $17,700.35 to be invoiced on an annual basis.
- DWV SaaS costs for up to 1,000 users from 7/1/24 to 6/30/25: $43,075.63 to be invoiced on an annual basis.
- DWV SaaS costs for up to 1,000 users for 10 months from 7/1/25 to 4/30/26: $36,793.76 to be invoiced on an annual basis.

Change Item 4 (AKA Task 4)

Description: Update the due date for CN3, Task 1 Combine separate versions of SDWIS/State into one version. The task was delayed by a later than expected cutover to SDWIS from the EGLE NC program. This change notice changes the target due date from 12/31/23 to 6/30/24. No additional LOE is currently expected due to the date change. However, costs were recalculated to assume that all work on this project would start in 2024, using 2024 labor rates at the SME 3 level.

Target Due Date: 6/30/24

Background: This change notice changes the target due date from 12/31/23 to 6/30/24, and updates the labor rate used to calculate expected costs. Tasks are unchanged from CN 3.

Assumption:
- Assumes that the project will not start until January 2024, so updated rates are provided for the same level of effort.

Impact:
- An additional $6,495.89 in labor costs from Change Notice 3 for 1,547 labor hours at the 2024 SME 3 rate of $144.17/hour.
- Total cost for this task is estimated to be $223,025.46 instead of $216,529.57.

Change Item 5 (AKA Task 5)

Description: Change the end date of Change Notice 2, Task 4, and Change Notice 3, Task 2 for LHD Training and In-Person Training. No additional costs are expected with this change.

Target Due : 12/31/23

Background: Due to a conflict with the in-person meeting originally planned for September, 2023, the in-person training may be moved to October 2023 (FY 24). Additional follow-up questions may be asked after the in-person training and the end of 2023. No additional costs are expected with this date change.

Change Item 6 (AKA Task 6)
Description: Data Validation Tool

Target Due Date: 6/30/2024

Background: We need more robust data validation processes to prevent low-quality data or results of concern into SDWIS without staff intervention. This change notice changes the end date of the Data Validation Tool from 12/31/23 to 6/30/24.

Assumption:
- Assumes that the bulk of the project will not start until January 2024. Assumes that 80 hours will be used at the 2023 SME 3 rate for discovery of options available for CMDP in 2023.
- The remainder of the hours (740 hours) would be charged at the 2024 labor rates.
- Assumes there will be an additional $3,735.15 in labor costs above what was quoted in CN 3 Task 6.

Impact:
- Total estimated task costs change from $118,470.10 to $122,205.25.

Change Item 7 (AKA Task 7)

Description: Change the expected target date for the Separate Reporting Database from 4/30/23 to 4/30/26. No additional costs are associated with this change.

Target Due Date: 4/30/2026

Change Item 8 (AKA Task 8)

Description: Change the expected target date for the Power BI task from CN3, Task 4 from 6/30/23 to 12/31/24. So far in 2023, 2.5 hours ($389.13) have been charged to the Power BI Task. This Task reprices the remaining 57.5 hours using the 2024 rates for an SME 3. The original price for this task using 2023 rates for 60 hours at the SME 3 rate was $8,398.04.

Target Due Date: 12/31/2024

Impact:

- Price for 57.5 hours at the SME 3 rate for 2024 is $8,289.57.

Change Item 9 (AKA Task 9)

Description: EGLE NC Training And Migration Assistance. This adds additional funding for FY23 to assist the EGLE NC program with migration and cutover from WaterTrack to SDWIS in FY23 and FY24, and adds time for additional webinars being conducted in FY23 and FY24 for EGLE NC and LHD staff.

Target Due Date: 12/31/2024

Background: Adds funding for five webinars in FY23. These webinars are already scheduled, and registration links have already been sent out to EGLE NC staff. Adds funding for 5 additional webinars to start in January 2024. Adds time to assist with migration of data from WaterTrack to SDWIS before the October cutover date, including meetings with EGLE staff, and adds time for the final migration from WaterTrack to SDWIS in October.

GEC Tasks:

Tasks	Effort Estimate (in hours)
Additional 10 webinars	105
Migration Assistance and Cutover Meetings	73
Migration Assistance and Cutover Activities	276
Total	454.00

Assumption:
- Assumes that GEC will provide one hour of office hours weekly for the LHDs from October 23, 2023 through December 31, 2023 under the SDWIS support task (no additional funding is being requested for this task, as this fits with the scope of Change Notice 1).
- Assumes that EGLE adds funding for the five webinars scheduled in FY23 for two GEC SMEs for each webinar. Time includes .5 hours for providing webinar metrics and a copy of each recording, six hours to prepare for each webinar, and two hours to develop homework assignments for the LHDs.
- Using the same assumptions above, an additional 5 webinars (not yet scheduled), starting in January 2024. The content of these webinars will be determined in consultation with EGLE NC staff.
- Assumes that three GEC SME 3 level staff members attend a weekly meeting for 0.5 hours each, plus attend one weekly one hour meeting for migration and cutover planning for 14 weeks, and assumes an additional 10 hours of ad hoc meetings and coordination to for migration and cutover planning.
- Assumes that samples, legal entities, disinfection byproduct schedules, sampling points, treatment plant point of use devices, sampling points and schedules with the treatment plants still need to be migrated from WaterTrack before the October cutover. Assumes time for planning time and follow up for the cutover meetings, and also assumes that two people will be needed for three full days for the cutover and testing.

Impact:
- Total estimates costs at the SME 3 rate for each task is as follows:
  - $17,299.97 for 120 hours at the SME 3 rate for FY24.
  - $46,749.11 for 334 hours at the SME 3 rate for FY23.
  - Total of $64,049.08 for 454 hours.

DELIVERABLES:
Deliverables will not be considered complete until the Agency Project Manager has formally accepted them. Deliverables for this project include:

Deliverable Name	Description
Task 1: SWIFT Surveys	Provides updated pricing for one combined version of SWIFT Surveys Savings from Original Contract for: • $59,171 (Year 3 CWS SWIFT) • $55,596 (Year 4 CWS SWIFT) **Savings: $114,767**

Deliverable Name	Description
Task 2: RECAP-Reports	Provides updated pricing for one combined version of RECAP Reports Savings from Original Contract for: • $44,210 (Year 4 RECAP-Reports) • $45,315 (Year 5 RECAP-Reports) **Savings: $89,525**
Task 3: RECAP-Dashboard and DWV	Provides updated pricing for combined versions of RECAP-Dashboard and DWV for CN3 Task 5
Task 4: Combine Versions of SDWIS/State	Provides updated pricing based on 2024 rates, and changes the task due date for CN3 Task 1
Task 5: Training focused on LHD Staff for SDWIS and SWIFT	Changes the due date for CN2 Task 4 and CN3 Task 2
Task 6: Data Validation Tool	Changes the due date for CN3 Task 6
Task 7: Separate Reporting Database	Changes the due date for CN3 Task 8
Task 8: Power BI Views	Changes the due date for CN3 Task 4
Task 9: EGLE NC Training and Migration Assistance	Adds a task to continue providing webinars for NC and LHD staff, and to continue assisting with migration and cutover activities

ACCEPTANCE CRITERIA:
Acceptance criteria for the deliverables include:
- All written deliverables will be written clearly in plain language.
- No change in acceptance criteria from Change Notices 2 and 3

The tables below show a summary of total expected costs for Change Notice 4.

Total Costs for CN 4				
Change Item No.	**LOE**	**Labor Cost**	**Other Direct Costs**	**Total Labor Cost and ODCs**
Change Item 1	9.00	$1,343.64	$292,809.28	$294,152.92
Change Item 1 Savings			-$114,767.00	-$114,767.00
Change Item 2	0.00	$0.00	$143,433.28	$143,433.28
Change Item 2 Savings			-$89,525.00	-$89,525.00
Change Item 3	0.00	$0.00	$118,524.78	$118,524.78
Change Item 4	0.00	$6,495.89	$0.00	$6,495.89
Change Item 5	0.00	$0.00	$0.00	$0.00
Change Item 6	0.00	$3,735.15	$0.00	$3,735.15
Change Item 7	0.00	$0.00	$0.00	$0.00
Change Item 8	57.50	$8,289.57	$0.00	$8,289.57
Change Item 9	454.00	$64,049.08	$0.00	$64,049.08
Total	**520.50**	**$83,913.34**	**$350,475.33**	**$434,388,67**

Total Costs for CN 4 expected in FY2023				
Change Item No.	**LOE**	**Labor Cost**	**Other Direct Costs**	**Total Labor Cost and ODCs**
Change Item 1	0.00	$0.00	$0.00	$0.00
Change Item 1 Savings			$0.00	$0.00
Change Item 2	0.00	$0.00	$0.00	$0.00
Change Item 2 Savings			$0.00	$0.00
Change Item 3	0.00	$0.00	$0.00	$0.00
Change Item 4	0.00	$0.00	$0.00	$0.00
Change Item 5	0.00	$0.00	$0.00	$0.00
Change Item 6	0.00	$0.00	$0.00	$0.00
Change Item 7	0.00	$0.00	$0.00	$0.00
Change Item 8	0.00	$0.00	$0.00	$0.00
Change Item 9	334.00	$46,749.11	$0.00	$46,749.11
Total	**334.00**	**$46,749.11**	**$0.00**	**$46,749.11**

Total Costs for CN 4 expected in FY2024				
Change Item No.	**LOE**	**Labor Cost**	**Other Direct Costs**	**Total Labor Cost and ODCs**
Change Item 1	9.00	$1,343.64	$99,628.60	$100,972.24
Change Item 1 Savings			-$59,171.00	-$59,171.00
Change Item 2	0.00	$0.00	$70,656.79	$70,656.79
Change Item 2 Savings			-$44,210.00	-$44,210.00
Change Item 3	0.00	$0.00	$64,030.67	$64,030.67
Change Item 4	0.00	$6,495.89	$0.00	$6,495.89
Change Item 5	0.00	$0.00	$0.00	$0.00
Change Item 6	0.00	$3,735.15	$0.00	$3,735.15
Change Item 7	0.00	$0.00	$0.00	$0.00
Change Item 8	57.50	$8,289.57	$0.00	$8,289.57
Change Item 9	120	$17,299.97	$0.00	$17,299.97
Total	**129**	**$37,164.22**	**$130,935.05**	**$168,099.28**

Total Costs for CN 4 expected in FY2025				
Change Item No.	**LOE**	**Labor Cost**	**Other Direct Costs**	**Total Labor Cost and ODCs**
Change Item 1	0.00	$0.00	$193,180.68	$193,180.68
Change Item 1 Savings			-$55,596.00	-$55,596.00

![State of Michigan Procurement logo — Michigan.gov/MiProcurement]

Total Costs for CN 4 expected in FY2025				
Change Item No.	LOE	Labor Cost	Other Direct Costs	Total Labor Cost and ODCs
Change Item 2	0.00	$0.00	$72,776.49	$72,776.49
Change Item 2 Savings			-$45,315.00	-$45,315.00
Change Item 3	0.00	$0.00	$54,494.11	$54,494.11
Change Item 4	0.00	$0.00	$0.00	$0.00
Change Item 5	0.00	$0.00	$0.00	$0.00
Change Item 6	0.00	$0.00	$0.00	$0.00
Change Item 7	0.00	$0.00	$0.00	$0.00
Change Item 8	0.00	$0.00	$0.00	$0.00
Change Item 9	0.00	$0.00	$0.00	$0.00
Total	**0.00**	**$0.00**	**$219,540.28**	**$219,540.28**

Time & Materials Hourly Rate Card:
For reference. The GEC time and materials hour rate card was amended with Change Notice #1.

GEC Staff Description	GEC T&M Hourly Rates				
	2022	2023	2024	2025	2026
Program Manager	$146.92	$155.87	$160.54	$165.36	$170.32
Senior Project Manager	$153.05	$162.37	$167.24	$172.26	$177.42
Developer 3	$122.42	$129.87	$133.77	$137.78	$141.91
Web Designer 2	$77.82	$77.26	$79.57	$81.96	$84.42
Subject Matter Expert 3	$131.93	$139.97	$144.17	$148.49	$152.95
Subject Matter Expert 3	$122.42	$129.87	$133.77	$137.78	$141.91
Analyst III	$101.27	$107.44	$110.66	$113.98	$117.40
Analyst III	$86.13	$91.37	$94.12	$96.94	$99.85
Analyst III	$60.65	$64.34	$66.27	$68.26	$70.31
Senior Data Specialist	$74.82	$79.38	$81.76	$84.21	$86.74

PROJECT CONTROL AND REPORTS:

A bi-weekly progress report must be submitted to the Agency and DTMB Project Managers throughout the life of this project. This report may be submitted with the billing invoice. Each bi-weekly progress report must contain the following:

1. **Hours**: Indicate the number of hours expended during the past two weeks, and the cumulative total to date for the project. Also state whether the remaining hours are sufficient to complete the project.
2. **Accomplishments**: Indicate what was worked on and what was completed during the current reporting period.
3. **Funds**: Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

SPECIFIC DEPARTMENT STANDARDS:

Agency standards, if any, in addition to DTMB standards.

PAYMENT SCHEDULE:

Payment will be made on a Time and Materials basis monthly for all items in the Scope of Work except the License and SaaS payments for GECSWS. The license and first annual SaaS payments will be made on the following schedule.

- DWV: EGLE is invoiced for the perpetual license as soon as EGLE is provided access to DWV in the Test environment or the server is provisioned, whichever is sooner. (GEC will coordinate with SOM to ensure the timing of the latter matches their preference.) The SaaS will be invoiced monthly for up to 12 months.
- RECAP−Dashboard: EGLE is invoiced for the perpetual license as soon as EGLE is provided access to RECAP−Dashboard or the server is provisioned, whichever is sooner. (GEC will coordinate with SOM to ensure the timing of the latter matches their preference.) The SaaS will be invoiced monthly for up to 12 months.

DTMB will pay CONTRACTOR upon receipt of properly completed invoice(s) which shall be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices should reflect actual work completed by payment date, and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices shall describe and document to the State's satisfaction a description of the work performed, the progress of the project, and fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense. Payment shall be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

PROJECT CONTACTS:

The designated Contractor Project Manager is:
        Name Kim Clemente
        Department Project Manager
        Address 3370 N Hayden Rd, Suite 123-302
        City/State/Zip Scottsdale AZ, 85251
        Phone Number 407-720-0477
        Email Address: kim.clemente@1gec.com

Kim will serve as the primary contact with regard to services who will have the authority to act on behalf of the Contractor in matters pertaining to the implementation services.

The designated Agency Program Manager is:
        NameRonda Page
        DepartmentEGLE
        AreaDWEHD
        Building/FloorCon Hall
        Address525 W. Allegan
        City/State/Zip Lansing, MI 48933
        Phone Number517-242-4114
        Fax Number
        Email Addresspager1@michigan.gov

Name ⌨ : Dana DeBruyn
Department ⌨: EGLE
Area ⌨ : DWEHD
Building/Floor ⌨ Constitution Hall, 1st Floor, North Tower
Address ⌨ : 525 W. Allegan
City/State/Zip ⌨ : Lansing, MI 48933
Phone Number ⌨: 517-930-6463
Fax Number: N/A
Email Address ⌨ : debruynd@michigan.gov

Dana DeBruyn will serve as the primary contact with regards to EGLE items and she will have the authorization to act on behalf of Ronda Page in matters pertaining to the SOM EGLE items, while Ronda Page is out of the office.

The designated DTMB Program Manager is:
NameLaura Brancheau
Department DTMB
AreaAgency Services Supporting EGLE, DNR, MDARD & DMVA
Building/FloorConstitution Hall, 1st Floor, North Tower
Address525 W. Allegan
City/State/Zip Lansing, MI 48933
Phone Number 517-335-1334
Fax Number
Email Addressbrancheaul@michigan.gov

AGENCY RESPONSIBILITIES:
GEC will need assistance from SOM in setting up conference calls with appropriate staff for appropriate tasks and will need to coordinate closely with SOM staff on all tasks.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:
Contractor staff will work at the GEC offices located in Scottsdale, AZ.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:
Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of 8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing. No overtime will be permitted.

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
320 S. WALNUT ST., LANSING, MICHIGAN 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **3**

to

Contract Number **210000000877**

<table>
<tr><td rowspan="7">CONTRACTOR</td><td>Global Environmental Consulting, Inc</td><td rowspan="7">STATE</td><td>Program Manager</td><td>Various</td><td>EGLE</td></tr>
<tr><td>3370 N. Hayden Road</td><td rowspan="2"></td><td></td><td></td></tr>
<tr><td>Scottsdale, AZ 85251</td><td></td><td></td></tr>
<tr><td>Laurie Potter</td><td rowspan="4">Contract Administrator</td><td>Sarah Platte</td><td>DTMB</td></tr>
<tr><td>603-397-7838</td><td>517-219-2406</td><td></td></tr>
<tr><td>laurie.potter@1gec.com</td><td>plattes3@michigan.gov</td><td></td></tr>
<tr><td>VS0101351</td><td></td><td></td></tr>
</table>

CONTRACT SUMMARY

SAFE DRINKING WATER INFORMATION SYSTEM (SDWIS) AND SUPPORTING SYSTEMS

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
May 1, 2021	April 30, 2026	5 - 1 Year	April 30, 2026

PAYMENT TERMS		DELIVERY TIMEFRAME	

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		April 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$2,586,942.57	$37,553.20	$2,624,495.77

DESCRIPTION

Effective 3/29/2023, the parties add the attached Statement of Work for the purpose of transitioning Michigan's Environment, Great Lakes, and Energy (EGLE) agency's Safe Drinking Water Information System (SDWIS). This will help to prepare data for reporting/dashboard purposes and to purchase and deploy additional GEC applications for managing Public Water Supply data. The State also adds $37,553.20 in funding to support the work.

All other terms, conditions, specifications and pricing remain the same. Per Contractor, Agency, DTMB Central Procurement Services and State Administrative Board approval on 08/02/2022.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Page	517-242-4114	PAGER1@michigan.gov

Project Title: Contract 210000000877 Change Notice #3 – FY23 PWS Data Management Support	Period of Coverage: Fiscal Year 2023
Requesting Department: EGLE	Date: 08/11/2022
Agency Project Manager: Ronda Page	Phone: (517) 242-4114
DTMB Project Manager: Laura Brancheau	Phone: (517) 335-1334

BACKGROUND:
Michigan's Department of Environment, Great Lakes, and Energy (EGLE)-Drinking Water and Environmental Health Division (DWEHD) has identified additional Public Water Supply (PWS) program data support needs that can be fulfilled by Global Environmental Consulting (GEC) through a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:
The objective of this change notice in relationship to the project is to seamlessly transition Michigan EGLE from its current systems to the Compliance Monitoring Data Portal (CMDP) and Safe Drinking Water Information System (SDWIS) State in preparation for future migration to EPA's cloud hosted version of SDWIS, prepare data for reporting/dashboard purposes and to purchase and deploy additional GEC applications for managing Public Water Supply (PWS) data.

EGLE's DWEHD currently uses multiple systems for managing Safe Drinking Water Act data:

- SDWIS/State is used for the Community Water Supply (CWS) Program.
- WaterTrack is used for the Noncommunity Water Supply (NCWS) Program, and the NCWS program is in the process of migrating data to a separate version of SDWIS/State.
- WaterChem is a separate database which contains a copy of the State Drinking Water Lab data, as well as Noncommunity data received from private labs which are manually entered into WaterChem via WaterTrack.
- Data for the laboratory certification program are housed in another standalone database.

The change items in this change notice include:
- Coordinate migration of NCWS and CWS data and data flows into a single instance of SDWIS State in anticipation of future migration to EPA's cloud hosted version of SDWIS.
- Execute training plans (virtual and in-person) for local health department (LHD) staff, focusing on SDWIS and SWIFT applications.
- Implement CMDP and assist private laboratories with CMDP reporting.
- Synchronize, and maintain the data synchronization engine for CMDP, including installing any updates as EPA releases them.
- Determine which SDWIS views would be feasible for Power BI data models.
- Discuss the capabilities of the GEC applications RECAP−Dashboard [formerly Compliance Manager Dashboard (CMD)] and Drinking Water Viewer (DWV). [Participate in conference calls, provide demos, and answer questions for EGLE about Dashboard and DWV so that EGLE can determine if we want the software]. If it is determined DWV or Dashboard will be used by SOM, we intend to purchase and deploy

the application as a part of this change notice. SOM intends to purchase two separate instances of Dashboard and DWV; one for the CWS program, and one for the NCWS program.

- Host discovery sessions evaluating the feasibility of developing a data validation tool with rapid data entry capability for data flowing into [entering] the SDWIS DB from external sources, and develop the data validation tool.
- Support the State's Governance, Risk and Compliance process for any added application, where it is required (new ATOs).

SCOPE OF WORK:

Change Item 1 (AKA Task 1)

Description: Work with EGLE to combine NCWS and CWS data and data flows into a single instance of SDWIS/State in anticipation of future migration to EPA's cloud hosted version of SDWIS. GEC will create structure set migration files with data from SDWIS NC, and will migrate data to the test version of SDWIS using EPA's MigrateToState application. GEC and EGLE will check over the data in the test version of SDWIS before refreshing the production version of SDWIS. Additional testing will be performed after data are moved to production. GEC will work with the MiLogin team to change the configuration and MiLogin links to ensure that LHDs will still have access to SDWIS.

Target Due Date: 12/31/2023

Background: In order to pursue other items in this change notice such as CMDP, we first need to consolidate our SDWIS environments. NCWS staff, as well as LHDs department staff, are expected to be conducting their everyday work in SDWIS beginning in May 2023. Beginning work to merge the two databases soon after will be essential to pursue private lab electronic data flow (Task 2).

GEC Tasks:

Tasks	Effort Estimate (in hours)
GEC will host calls with EGLE to determine the impact of merging two SDWIS databases and identify areas of concern, coordinate with EGLE NC on the migration process, and biweekly to weekly meetings.	142
Review data in SDWIS NC and SDWIS CWS prior to creating migration structure sets and migrating data to one version of SDWIS	100
Determine best way to standardize data, use of data fields, and SDWIS processes before data migration to test SDWIS	100
Data Transformation	100
Create queries and migration file structure sets for basic inventory (includes water system name, service areas, population, service connections, and some water system indicators) and legal entities	80
Create queries and migration file structure sets for the remainder of the inventory information	80
Create queries and migration file structure sets for TCR samples	100
Create queries and migration file structure sets for LCR and chemical samples	100
Create queries and migration file structure sets for monitoring schedules	100
Create queries and migration file structure sets for compliance schedules	100
Create queries and migration file structure sets for violation and enforcement actions	60
Create queries and migration file structure sets for site visits	40

Tasks	Effort Estimate (in hours)
Migrate all inventory and legal entities	90
Migrate TCR samples	80
Migrate LCR and chemical samples, and monitoring schedules	80
Migrate compliance schedules, violation and enforcement actions, and site visits	95
MiLogin and Configuration for one version of SDWIS	50
Migration Plan, and update other documentation (Training, Testing, Implementation, Configuration plans, etc.)	50
TOTAL	1,547

Assumptions:
- Weekly to bi-weekly calls will be needed to coordinate with the EGLE NC program to combine both versions of SDWIS. Some coordination may be required with CWS staff if SDWIS data fields are used for different purposes by each program, or if lab analytes/methods, or other data fields need to be standardized.
- GEC understands that the NCWS program has been attempting to mirror CWS during their transition from WaterTrack to SDWIS NC, a lot of fields serve similar functions right now and may be easier to merge. Some data transformation may be needed before migrating data into one version of SDWIS.
- Estimates assume that GEC will need to migrate data to one version of SDWIS twice. Once into a test version of SDWIS so EGLE CWS and NC can review the data, and then will need to be migrated into SDWIS production after EGLE reviews and approves of the data in SDWIS test.
- Calls will also be needed to coordinate the cutover from SDWIS NC to the combined version of SDWIS for NC staff and the LHDs. GEC estimates are based on multiple cutovers to using the combined version of SDWIS/State. For example, while inventory data is being migrated to the combined version of SDWIS/State production, inventory updates to SDWIS NC will need to stop momentarily. Once the inventory data has been migrated to the combined version of SDWIS, all inventory changes will need to be made in the combined version of SDWIS NC to avoid data loss or the need for double data entry by NC or LHD staff.
- Additionally, we assume that in this merge internal (EGLE staff) and external (LHD) users will be able to access the SDWIS production database.
- Documentation will be created or updated as requested by DTMB and EGLE, and assumes GEC will respond to one round of comments on the documentation.
- GEC will work with the MiLogin team on reconfiguring the MiLogin set up for NC and LHD staff, and update/add links in SDWIS for LHDs.
- Assumes that one year of TCR, and three to nine years of lead and copper and chemical samples will need to be migrated to the combined version of SDWIS.
- Once both versions of SDWIS are combined, GEC will need to decommission SDWIS NC, and will need to re-evaluate the SDWIS server hosting costs for the project.

Impact: Combining the CWS and NCWS SDWIS databases will allow SDWIS administrative tasks to be consolidated between the two units, as well as federal reporting efforts to EPA.
- This task will require an additional 1,547 in labor hours and $216,529.57 in labor costs using the SME 3 rate.

Change Item 2 (AKA Task 2)

Description: Train NCWS contract staff (LHDs) and SOM staff on SDWIS and SWIFT and provide backup support for SOM for questions from users.

Target Due Date: Before end-of-fiscal-year 2023 (varied dates necessary for training).

Background: EGLE will leverage the domain knowledge GEC has related to SDWIS to develop and provide training to the LHDs to aid in the successful adoption of using SDWIS and SWIFT by the LHDs. **This task is contingent upon LHDs receiving access to GEC products via the alternative VPN option GEC and MiLogin were collaborating on from a previous change notice.**

GEC Tasks:

Tasks	Effort Estimate(in hours)
Execute three in-person training sessions in FY23 with two GEC staff members for two days each. GEC allows 40 hours to integrate their SDWIS/SWIFT training plan with EGLE's draft in-person training plan. The first two in-person trainings will be regional (one in the Upper Peninsula and one in the Lower Peninsula). These trainings will provide in-depth training on SDWIS and SWIFT. There will be an additional in-person training in the Lansing area in late FY23 for LHD staff to reinforce SDWIS and SWIFT skills. This in-person session will reiterate highlights from the virtual sessions, as well as present hands-on demonstration of key points and answer attendees' questions about SDWIS. GEC will provide copies of their agendas for the training plan.	232
Execute the additional 5 virtual training sessions in FY23 that were planned in the FY22 change notice. GEC will facilitate 5 GoToWebinar training sessions about specific rules: RTCR/GWR, DBPs, SWTRs, LCR, Chems which will occur early in FY23. Attendance in one virtual meeting to plan the training scenario is estimated (two people will attend and the PM will coordinate with SOM). Execute (5) 2-hour virtual training sessions. Each virtual session requires two GEC staff on GoTo Webinars. EGLE will be provided with recordings of the trainings for later use as needed. Each session will be scheduled for 2 hours to allow time for questions.	30
Provide post training support to either SOM staff supporting LHDs or LHDs direction, as determined by EGLE. This will include any follow up training sessions, as well as support via GEC Zendesk for questions specific to training. Support will not exceed 65 hours.	65
TOTAL	327

Assumptions:
- Assumes that GEC can repurpose existing training materials, but up to 2 hours per person are needed for the virtual training sessions to: set up specific examples in SDWIS or in a GEC application; plan agendas or scenarios with EGLE, to set up and schedule the webinars, and provide the question and answer excel files from the trainings and a link to the video recording. If additional EGLE-specific customization is required, GEC will utilize the post-training support task for additional effort requested.
- Assumes that each trip will require one GEC staff member at the SME 3 rate and at the Analyst 2 rate. A staff member at the SME 3 rate will provide SDWIS training, and a staff member at the Analyst 2 rate will provide training on GEC applications.
- Assumes that two SME 3 staff members will attend the virtual webinars.
- Assumes that each in person trip is for two full on-site days, and includes three nights of hotel stays, as the availability of flights the morning of, or the evening after the training may be limited.

Impact:
- 327 Additional Hours, total of $51,184.49 in labor and travel costs.
- $40,132.49 Additional Labor Cost in 2023.

- $11,052.00 estimated travel costs including:

- Three-night hotel stay (two rooms for two people) at the per diem rate of $106 per night per in- person training. This would result in nine total days of board for two people to be paid. Note that additional costs may apply for trainings outside of the Lansing area. GSA Federal Government rates will be used once the location of all three trainings is determined.
- Rental car ($150 per day for 12 days).
- Per diem (meals and incidentals) of $48 for first and last travel days and $64 per diem for onsite days for two people. Note that additional costs may apply for trainings outside of the Lansing area. GSA Federal Government rates will be used once the location of all three trainings is determined.
- Estimated airfare at $900 round trip each for two people.
- Estimated $100 each for two people for ground transportation or parking.

Change Item 3 (AKA Task 3)

Description: CMDP Transition and Implementation

Target Due Date: 12/31/2023
Background: Previous efforts to implement the use of CMDP included:
- Developing a transition plan.
- Installation and configuration of test and production environments to synchronize data with CMDP.
- Preparing and migrating data into CMDP.
- Documenting, implementing, and testing data flows.
- Began preparation of Training Plans and training materials for EGLE staff and onboarding private labs.

GEC Tasks:

Tasks	Effort Estimate (in hours)
Continue support for on-boarding of private labs. Under a previous contract through ERG, GEC supported EGLE in developing lab on-boarding materials, including drafting website content, path to production standards, and a laboratory survey. GEC anticipates that lab outreach will begin under this Change Notice and this task is to work with onboarding private labs. This estimate assumes 4 hours per lab on average, which is supported by work with other primacy agencies and assumes GEC will support 20 labs.	80
Although SOM has 230 certified labs, not all labs are likely to elect or be convinced to use CMDP. This estimate assumes GEC will Train the Trainers and serve as an option if labs have problems and SOM staff cannot address their issues. GEC will assist SOM staff if they have questions on CMDP or need additional assistance.	50
Assist EGLE in maintaining training materials and developing new training materials, such as holding training webinars, producing training videos, developing quick reference guides, updating FAQs, maintaining CMDP Best Practices, and updating Path to Production documentation.	32
Training for NC and CWS staff – likely 1-2 staff from the NC and CWS programs devoted to CMDP will need refresher training on how to use CMDP, reminder of need for routine password changes, and will need to access GEC with other questions about CMDP as the tool is rolled out.	40
Set up DSE and sync data in test and production. Manage configuration of DSE, manage logs and update the software if new versions are created.	72

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Documentation. Create documentation for CMDP and the DSE. This could include Configuration,Testing, Installation, and Training plans. This includes responding to one round of comments from SOM.	50
TOTAL	324

Assumptions: Assumptions for this task include

- The presence of one SDWIS database where NCWS and CWS are carrying out everyday work.
- In 2023, approximately 72 hours will be needed to set up and sync the DSE. In future years, only 32 hours will be required for this task.
- GEC and EGLE will build upon and update existing CMDP training materials, and develop new training materials as needed.
- GEC will update, or create new documentation for CMDP and the DSE, including but not limited to a Training Plan, Testing Plan, Installation, and Configuration Plan documents as required by DTMB.

Impact: Implementation of CMDP would greatly reduce the manual data entry workload of EQAs and LHD staff who currently manually enter sample results into SDWIS. It would also ensure higher quality water sampling data is flowing into the SDWIS database in a timely manner. EGLE would also be able to ensure higher integrity of the chain of custody for water samples.

- A total of 324 hours is anticipated to be used at a labor cost of $45,349.44 for all tasks anticipated to be completed in FY 23.
- The SME 3 rate was used to calculate costs for all tasks.
- Costs for additional years is anticipated to be:
  - FY24: 32 hours at the SME 3 rate and $4.613.33
  - FY25: 32 hours at the SME 3 rate and $4,751.73
  - FY26: 32 hours at the SME 3 rate and $4894.28.

Change Item 4 (AKA Task 4)

Description: Power BI data models (shared services - other states could utilize the views/data models and reports we create) as well as developing and implementing custom reports.

Target Due Date: 6/30/2023

Background: The purpose of this task is to both fill reporting gaps needed for CWS and NCWS that may not be fulfilled by other applications.

GEC Tasks:

Tasks	Effort Estimate(in hours)
GEC will schedule calls (10-hour allocation) to evaluate EGLE reporting and querying needs that could be met via SDWIS views. Two GEC staff will attend each call. The goal will be to pull information, including pulling data from different tables and preserving relationships, to enable EGLE to use those views in Power BI and other reporting tools. GEC will confirm that SDWIS views will not impact performance.	20
GEC will assist in the pulling of information, including pulling data from different tables and preserving relationships, to enable EGLE to use those views in Power BI.	40
Total	60

Assumption: EGLE will provide the business cases that would be best served by SQL views and GEC will create the views in the test and production environments. The SDWIS views will not impact the production database or SDWIS application performance. Assumes that two GEC staff members will each attend up to 10 one-hour calls with EGLE to determine reporting and querying needs.

Impact: Having access to pre-established table relationships would allow both units to publish Power BI reports ata higher frequency.

- An additional 60 hours of labor, and $8,398.04 at the SME 3 rate.

Change Item 5 (AKA Task 5)

Description: Evaluate the Feasibility of Using RECAP−Dashboard and Drinking Water Viewer (DWV) and create action items for implementation once a choice is made. DWV for NC program will be implemented and deployed toproduction for the State and LHDS immediately after a choice is made.

Target Due Date for Discovery: 4/30/2023

Target Due Date for Deployment of Applications to Production: 12/31/2023

Background: To fill necessary gaps in reporting required for business, EGLE is interested in evaluating DrinkingWater Viewer (DWV) and Compliance Manager Dashboard (CMD). Both the CWS and NC programs plan on purchasing separate instances of RECAP−Dashboard and DWV.

GEC Tasks:

Tasks	Effort Estimate(in hours)
Evaluate CMD and DWV for SOM. Hold meetings to discuss interest and answer questions about feasibility after a demo of the products.	10
SEM Documentation	50
NCWS RECAP−Dashboard Perpetual License for 151 to 200 users	$18,000
NCWS RECAP−Dashboard SaaS for FY23 for up to 151 to 200 users	$19,345
NCWS DWV Perpetual License for 101 up to 500 users	$25,000
NCWS DWV SaaS for 101 up to 500 users	$32,800
CWS RECAP−Dashboard Perpetual License for up to 100 users	$18,000
CWS RECAP−Dashboard SaaS for FY23 for up to 100 users	$16,165.00
CWS DWV Perpetual License for 101 up to 500 users	$25,000
CWS DWV SaaS for 101 up to 500 users	$32,800
Total	60

Table A. The SaaS pricing for RECAP−Dashboard (Compliance Manager Dashboard). The yellow highlighted row wasused to determine the cost estimates for the SaaS for the NC program. The blue highlighted row was used to determine the SaaS cost estimates for the CWS Program, and is based on the number of current RECAP users.

RECAP−Dashboard	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
1-5 users	$10,865.00	$11,136.63	$11,415.04	$11,700.42
6-10 users	$11,395.00	$11,666.63	$11,945.04	$12,230.42
11-15 users	$11,925.00	$12,196.63	$12,475.04	$12,760.42
16-20 users	$12,455.00	$12,726.63	$13,005.04	$13,290.42
21-25 users	$12,985.00	$13,256.63	$13,535.04	$13,820.42
26-50 users	$13,515.00	$13,786.63	$14,065.04	$14,350.42
51-75 users	$15,105.00	$15,376.63	$15,655.04	$15,940.42
76-100 users	$16,165.00	$16,436.63	$16,715.04	$17,000.42

RECAP–Dashboard	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
101-125	$17,225.00	$17,496.63	$17,775.04	$18,060.42
126-150	$18,285.00	$18,556.63	$18,835.04	$19,120.42
151-200	$19,345.00	$19,616.63	$19,895.04	$20,180.42
201-250 users	$20,405.00	$20,676.63	$20,955.04	$21,240.42
251-300 users	$21,465.00	$21,736.63	$22,015.04	$22,300.42
301-350 users	$22,525.00	$22,796.63	$23,075.04	$23,360.42
351-400 users	$23,585.00	$23,856.63	$24,135.04	$24,420.42

Table B. The SaaS pricing for Drinking Water Viewer. The yellow highlighted row was used to determine the costestimates for both the CWS and NC programs.

Authorized Users	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
1-5 users	$16,400.00	$16,810.00	$17,230.25	$17,661.01
6-10 users	$17,220.00	$17,650.50	$18,091.76	$18,544.06
11-15 users	$18,860.00	$19,331.50	$19,814.79	$20,310.16
16-20 users	$19,680.00	$20,172.00	$20,676.30	$21,193.21
21-25 users	$20,500.00	$21,012.50	$21,537.81	$22,076.26
26-50 users	$22,960.00	$23,534.00	$24,122.35	$24,725.41
51-75 users	$24,600.00	$25,215.00	$25,845.38	$26,491.51
76-100 users	$28,700.00	$29,417.50	$30,152.94	$30,906.76
101-500 users	$32,800.00	$33,620.00	$34,460.50	$35,322.01
501-1,000 users	$41,000.00	$42,025.00	$43,075.63	$44,152.52

Assumptions: The DWV user license numbers could also include lab staff or PWS staff if necessary. Both the CWSand NC programs will pay separate perpetual license fees for RECAP–Dashboard and DWV since they plan to purchase separate instances of each application. The license fee is invoiced when the environments are being setup. The SaaS fees will be invoiced monthly, as EGLE anticipates that they will be able to combine instances of RECAP–Dashboard and DWV once the separate instances of SDWIS are combined into one version of SDWIS. For example, the monthly SaaS charge for the CWS program for RECAP–Dashboard will be $1,347.08 for up to 12 months, and the monthly SaaS for the NC program would be $1,612.08 for up to 12 months. If at any time duringthe first 12 months, the CWS and NC program switch to using one version of SDWIS, the monthly RECAP SaaS would change to a combined total of $1,788.75 for up to 300 users. and. GEC will provide training as specified in the SaaS agreements for RECAP–Dashboard and DWV. If additional training is needed on these products, GEC canprovide additional training on a T&M basis under an existing training task on the project.

Impact:
- An additional 60 hours in labor and $8,398.04 in labor costs at the SME 3 rate.
- An additional $187,110 in software costs as follows:
  - An additional $18,000 for the Dashboard perpetual license for the NC Program.
  - An additional $18,000 for the Dashboard perpetual license for the CWS Program.
  - An additional $25,000 for the DWV perpetual license for the NC Program.
  - An additional $25,000 for the DWV perpetual license for the CWS Program.
  - An additional $19,345 for the Dashboard SaaS for 2023 for the NC Program.

- An additional $32,800 for the DWV SaaS for 2023 for the NC Program.

- An additional $16,165 for the Dashboard SaaS for 2023 for the CWS Program.
- An additional $32,800 for the DWV SaaS for 2023 for the CWS Program.

Change Item 6 (AKA Task 6)

Description: Data Validation

Tool

Target Due Date: <mark>12/31/2023</mark>

Background: We are in need of more robust data validation processes to prevent low-quality data or results of concern into SDWIS without staff intervention.

GEC Tasks:

Tasks	Effort Estimate (in hours)
GEC will host calls to facilitate discovery sessions, requirements gathering to determine the feasibility of developing a validation tool that performs quality check data validations possibly including but not limited to the following list (all sample analyte types) flowing in from CMDP: –Verifies collection date is present –Verifies collection time is present –Verifies lab receipt date is present -Verifies that sample record has a PWSID associated with it -Verifies if sample is tied to an active schedule –Sampling point required -Verifies sampling point is present –Verifies sample location is present –Lab sample ID less than 20 characters –Is the collection date within accepted range? –Is the lab receipt date within accepted range –Was Lab Receipt performed before Collection Date? –Verifies analysis start date present –Verifies analysis start time present –Is lab analysis date within the accepted range? –Was analysis date before lab receipt date? –Is analysis date before the collection date? –Holding time check? –Lab analyte method certification check? –Check for E. coli result if total coliform result is positive –Separates samples with a comment associated with the result for an EGLE staff member to vet - validation tool identifies trigger-level and maximum contaminant level (MCL) sample results for all analytes to put into a format suitable for an EGLE staff member to receive a priority alert. GEC will work with EGLE to design and refine requirements, and the process flows for the application, and will write user stories for review by EGLE.	80

Host discovery sessions assessing feasibility of creating a means to "hold" lead and copper samples within the validation tool until all required sampling is complete for a monitoring period, before migrating to SDWIS, to ensure accurate 90th percentile	70

Tasks	Effort Estimate (in hours)
calculations. Allow additional data entry to occur within the validation tool, beforedata migration, to improve ease of data entry by state staff. There may be value in other sample types being "held" for review and/or additional data entry.	
Development of the Data Validator Tool	350
Package Tool to make it available to other states with no licensing fee	80
Testing	50
Documentation	70
Training and User Support	120
Additional Hosting Fee ($100 per month)	$1,200
Total	820

Assumptions: GEC would work with EGLE to develop a data validator tool which would automatically check data quality before samples get entered or accepted into SDWIS. The data validator would hold lead and copper samples until all sampling is complete before allowing the data to migrate to SDWIS. The development would be completed on a T&M basis, not to exceed a total cost of $118,470.10. This includes working with EGLE to determine requirements for the tool, designing the tool and the process flows in the tool, writing user stories for the developers, developing the tool, testing tool development internally, training, and user support, creating documentation, and updating the GEC Knowledge Center. GEC estimates 10 hours per month would be needed fortraining and support on using the tool. GEC assumes that an additional $100 per month will be needed for hosting the application if only one or two SOM staff would routinely use the application. Additional hosting costs may apply if more than a few users are expected to use the tool.

Impact: This would significantly reduce the risk of lower quality data flowing into SDWIS, impacting federalreporting standards and public health risk.

Title Level	Rate	Hours	ODCs	Total
Senior Project Manager	$162.37	315.00		$51,146.02
Developer 3	$129.87	235.00		$30,519.59
Subject Matter Expert 3	$139.97	225.00		$31,492.67
Analyst II	$91.37	45.00		$4,111.82
Additional Hosting			$1,200	$1,200.00
Total		**820.00**		**$118,470.10**

Change Item 7 (AKA Task 7)

- **Description:** Support for Significant Change to ATO

Target Due Date: Ongoing

Background: Should any changes or applications selected above require changes to the ATO, this task allows forthe effort required to obtain the new authorization.
GEC Tasks:

Tasks	Effort Estimate (in hours)
This effort will be needed to answer risk questions and to update plan and strategy documents for: • SWIFT mobile application • RECAP−Dashboard • Drinking Water Viewer (DWV) • Migration of WaterTrack data to SDWIS_NC, and then combining both instances of SDWIS into one version • Providing alternate access to SDWIS for LHDs once versions of SDWIS are combined. • Data validator	100
Total	100

Assumptions: The goal will be to address all significant changes at one time, reducing overall effort and duration. It is assumed that a Significant Change will not require the same amount of effort and duration (less) as the original System Security Plan and Authority to Operate. GEC estimated that 50 hours at the Senior Project Manager rate, and 50 hours at the SME 3 rate would be needed for ATO activities.

Impact: Receiving approval of the ATO is a requirement to keep the system in a production environment and to go live with any new applications.
• An additional 100 hours and $15,116.79 in labor costs.

Change Item 8 (AKA Task 8)

Description: Separate Reporting Database

Target Due Date: 4/30/2023

> **Background:** A separate reporting database would prevent performance issues and allow for a backup version of the database for disaster recovery. It may also serve as a place to pull Power BI SDWIS views.

> **GEC Tasks:**

Tasks	Effort Estimate (in hours)
GEC will set up a separate instance of the SDWIS production database for large data pulls. This instance of the database can be used by SOM staff pulling data for Power BI and other data needs without affecting SDWIS database performance for all other SOM users. This database instance would sync up with data from SDWIS production every 15 minutes. • The cost would be $500 per month, plus 40 hours would be needed to set up and test the database. • To be used for Disaster Recovery.	40
Total	40

Assumptions: Data will be replicated on a near-live basis. Any issues that may arise and impact reporting uses will be reported to EGLE in a timely manner.

Impact: Will provide EGLE with a near-live data source for reporting and querying purposes.
• An additional 40 hours and $6.494.73 in labor costs at the Senior Project Manager level.

- An additional $500 per month in hosting costs, or $6,000 for one year.

DELIVERABLES:
Deliverables will not be considered complete until the Agency Project Manager has formally accepted them.Deliverables for this project include:

Deliverable Name	Description
Task 1: Merging CWS and NCWS SDWIS Databases	Project Management activities including notes delivered to DTMB project manager weekly, or on a reduced schedule as approved by the EGLE project owner. Includes updates on migration progress duringthe merge and addressing potential changes to business as a result for SOM. Deliverables: • Migration plan • Updates to existing, or creating new Implementation, Configuration, Training, andTesting Plans
Task 2: Training focused on LHD Staff for SDWIS andSWIFT	Deliverables: SDWIS/SWIFT training before end of FY23 fiscal yearUpdated Training Plan Work products: Training agendas will be provided. Some limited training materials may be created, but SDWIS trainingis generally done with a live demo of how SDWIS works. Targeted audience is LHD on SDWIS NC; GEC will provide recordings of trainings for EGLE to use later as needed.
Task 3: CMDP Transition and Implementation	Deliverables may include updates to training materialsdeveloped under another contract and webinar recordings of any training sessions conducted. Will include updates to existing, or creating new: Implementation, Configuration, Training, and Testing Plans.
Task 4: Power BI Views	Assistance in developing or creating the views.

Task 5: GEC Compliance Manager Dashboard and Drinking Water Viewer	Provide access to RECAP−Dashboard and/ or DWV for staff as requested by SOM. Deliverables: • Functional DWV and RECAP−DASHBOARD production environments for the NC and CWS Programs. • DWV and RECAP−Dashboard Implementation Plan • DWV and RECAP−Dashboard Configuration Plan • DWV and RECAP−Dashboard Training Plan • DWV and RECAP−Dashboard Testing Plan

Deliverable Name	Description
	Work Products: • Consulting assistance, conference call, answer questions from SOM • Documentation of processes, either by updating existing or creating new • Will provide a summary document of the DWV and other GEC products analysis and findings, or notes from question-and-answer sessions.
Task 6: Data Validation Tool	Deliverables: • Data Validation Tool Work Products: • Provide updates on conference calls with EGLE describing the gathering of requirements and feasibility of meeting the suggested data-check criteria. • Maintain OneNote notebook with notes from calls. • Copy of user stories or design materials • Data Validation Tool • Tool documentation and information in the Knowledge Center • Training and user support
Task 7: Support for Significant ATO Changes – LHD access, SDWIS for LHD FY 22	Assistance with answering risk questions based on information entered into Keylight for this change notice. May include delivering additional policies, or crosschecking policies already submitted under the first ATO.
Task :8 Separate Reporting Database	Deliverable is the separate SDWIS reporting database for data pulls.
Task 9: Savings from the Original Contract and CN2.	Savings from Original Contract for opting out of implementing Cert Tracker for both Drinking Water and Waste Water: • $162,390 (Cert Tracker – Drinking Water) • $152,439 (Cert Tracker – Waste Water) Savings from CN2 for not hiring a Temporary Contract Employee to focus on the WaterTrack to SDWIS Transition. • $310,689 (CN2 – Task 7) **Total Savings: $625,518**

ACCEPTANCE CRITERIA:
Acceptance criteria for the deliverables include:
- All written deliverables will be written clearly in plain language.
- For CMDP, GEC has trained the laboratories on using CMDP, and demonstrated that the data flow is working properly and ready for use.

- For the data validation tool, the tool accurately validates data before migration to SDWIS.
- Both DWV and RECAP−Dashboard are working in the production environment.

The table below shows a summary of total expected costs for Change Notice 3 for FY23.

Change Item No.	LOE	Labor Cost	Other Direct Costs	Total Labor Costand ODCs
Change Item 1	1,547.00	$216,529.57	$0.00	$216,529.57
Change Item 2	327.00	$40,132.49	$11,052.00	$51,184.49
Change Item 3	324.00	$45,349.44	$0.00	$45,349.44
Change Item 4	60.00	$8,398.04	$0.00	$8,398.04
Change Item 5	60.00	$8,398.04	$187,110.00	$195,508.04
Change Item 6	820.00	$117,270.10	$1,200.00	$118,470.10
Change Item 7	100.00	$15,116.79	$0.00	$15,116.79
Change Item 8	40.00	$6,494.73	$6,000.00	$12,494.73
Change Item 9		$-378,491	$-247,027	$-625,518
Total	**3,278.00**	**$79,198.2**	**$-41,665**	**$37,553.2**

Time & Materials Hourly Rate Card:
For reference. The GEC time and materials hour rate card was amended with Change Notice #1.

GEC Staff Description	GEC T&M Hourly Rates				
	2022	2023	2024	2025	2026
Program Manager	$146.92	$155.87	$160.54	$165.36	$170.32
Senior Project Manager	$153.05	$162.37	$167.24	$172.26	$177.42
Developer 3	$122.42	$129.87	$133.77	$137.78	$141.91
Web Designer 2	$77.82	$77.26	$79.57	$81.96	$84.42
Subject Matter Expert 3	$131.93	$139.97	$144.17	$148.49	$152.95
Subject Matter Expert 3	$122.42	$129.87	$133.77	$137.78	$141.91
Analyst III	$101.27	$107.44	$110.66	$113.98	$117.40
Analyst III	$86.13	$91.37	$94.12	$96.94	$99.85
Analyst III	$60.65	$64.34	$66.27	$68.26	$70.31
Senior Data Specialist	$74.82	$79.38	$81.76	$84.21	$86.74

Attachment 2: RECAP−Dashboard SaaS Agreement Summary

1.0 License Fee		
1.1	Duration of	Cloud based web application.
1.2	subscription	Hosted within the Microsoft Azure Government Cloud.
2.0 Initial Project Set-Up Assistance		
2.1	10 hours	GEC allots 10 hours set up the application.
2.3	8 hours	GEC provides four two-hour training sessions via webinars to show users and administrators how to use the application.
2.4	30 days – 1year	30 days is GEC's minimum timeline for implementation of the application but roll-out may require up to one year based on agency's schedule (and an approved ATO from DTMB to go to production.)
3.0 Annual Maintenance		
3.1	5 hours/ update	GEC deploys periodic software updates.
3.2	Annual	Regularly address issues identified throughout the year through routine maintenance, reports and requests from users, and automatic error-reporting feature built into our software. Fixes may be resolved by phone, email, orsoftware updates.
3.3		Forward-compatible support for the modernized SDWIS: GEC will ensure your application works with the modernized SDWIS when it is ready.
4.0 Ongoing Support		
4.1	Annual	Phone support available weekdays from 9:00 am – 5:00 pm MST (480) 827-9827.
4.2	Annual	24 x 7 access to GEC's complete knowledge center and user community https://gecsws.zendesk.com.
4.3	Annual	Emailing support support@1gec.com generates a help desk ticket. GEC responds to tickets in under four hours during normal business hours and strives to resolve requests as quickly as possible. The nature of the request determines the length of time to resolve the request.
4.4	Annual	Deployment webinars for every major deployment, including a summary of the enhancements made, and additional training on new features.
5.0 Additional Services are available as add-ons to the subscription and annual SaaS fees. Labor costs are provided on an hourly basis and can either be added as Time and Materials tracking or as anoption to purchase blocks of time at a fixed price.		
5.1	Additional users	Adding users is a modest increase in subscription price.
5.2	Additional training (on a Time and Materials basis)	Via webinar if users need a refresher course.
5.3	Web Services	New database connections.
5.4	Custom functionality	Developing state-specific functionality (e.g., creating additional features in RECAP−Dashboard that would meet the requirements of state-specific needs).

Version 2021-1

PROJECT CONTROL AND REPORTS:
A bi-weekly progress report must be submitted to the Agency and DTMB Project Managers throughout the life of this project. This report may be submitted with the billing invoice. Each bi-weekly progress report must contain the following:

1. **Hours**: Indicate the number of hours expended during the past two weeks, and the cumulative total to date for the project. Also state whether the remaining hours are sufficient to complete the project.
2. **Accomplishments**: Indicate what was worked on and what was completed during the current reporting period.
3. **Funds**: Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

SPECIFIC DEPARTMENT STANDARDS:
Agency standards, if any, in addition to DTMB standards.

PAYMENT SCHEDULE:
Payment will be made on a Time and Materials basis monthly for all items in the Scope of Work except the License and SaaS payments for GECSWS. The license and first annual SaaS payments will be made on the following schedule.

- DWV: EGLE is invoiced for the perpetual license as soon as EGLE is provided access to DWV in the Test environment or the server is provisioned, whichever is sooner. (GEC will coordinate with SOM to ensure the timing of the latter matches their preference.) The SaaS will be invoiced monthly for up to 12 months.
- RECAP−Dashboard: EGLE is invoiced for the perpetual license as soon as EGLE is provided access to RECAP−Dashboard or the server is provisioned, whichever is sooner. (GEC will coordinate with SOM to ensure the timing of the latter matches their preference.) The SaaS will be invoiced monthly for up to 12 months.

DTMB will pay CONTRACTOR upon receipt of properly completed invoice(s) which shall be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices should reflect actual work completed by payment date, and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices shall describe and document to the State's satisfaction a description of the work performed, the progress of the project, and fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense. Payment shall be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

PROJECT CONTACTS:
The designated Contractor Project
      Manager is: Name Kim Clemente
      Department Project Manager
      Address 3370 N Hayden Rd, Suite
      123-302 City/State/Zip Scottsdale AZ,
      85251 Phone Number 407-720-0477
      Email Address: kim.clemente@1gec.com

Kim will serve as the primary contact with regard to services who will have the authority to act on behalf of the Contractor in matters pertaining to the implementation services.

The designated Agency Program
        Manager is:
        Ronda Page
        Department: EGLE
        Area: DWEHD
        Building/Floor:
        Con Hall
        Street Address:
        525 W. Allegan
        City/State/Zip:
        Lansing, MI 48933
        Phone Number: 517-242-
        4114
        Email Address: pager1@michigan.gov

        Name ⌗ :
        Dana DeBruyn
        Department ⌗: EGLE
        Area ⌗ : DWEHD
        Building/Floor ⌗ Constitution Hall, 4th Floor, South
        Tower
        Address ⌗ : 525 W. Allegan
        City/State/Zip ⌗ : Lansing, MI
        48933
        Phone Number ⌗: 517-930-6463
        Email Address ⌗ : debruynd@michigan.gov

Dana DeBruyn will serve as the primary contact with regards to EGLE items and she will have the authorization to act on behalf of Ronda Page in matters pertaining to the SOM EGLE items, while Ronda Page is out of the office.

The designated DTMB Program
        Manager is:
        Name: Laura Brancheau
        Department DTMB
        Area: Agency Services Supporting EGLE, DNR,
        MDARD & DMVA
        Building/Floor: Constitution Hall, 1st Floor, North Tower
        Address 525 W. Allegan
        City/State/Zip Lansing, MI
        48933
        Phone Number: 517-335-
        1334
        Email Address: brancheaul@michigan.gov

AGENCY RESPONSIBILITIES:
GEC will need assistance from SOM in setting up conference calls with appropriate staff for appropriate tasks and will need to coordinate closely with SOM staff on all tasks.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:
Contractor staff will work at the GEC offices located in Scottsdale, AZ.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:
Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of

8:00 am to5:00 pm are to be observed unless otherwise agreed to in writing. No overtime will be permitted.

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
320 S. WALNUT ST., LANSING, MICHIGAN 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **3**

to

Contract Number **210000000877**

CONTRACTOR		STATE		
Global Environmental Consulting, Inc		Program Manager	Various	EGLE
3370 N. Hayden Road				
Scottsdale, AZ 85251		Contract Administrator	Sarah Platte	DTMB
Laurie Potter			517-219-2406	
603-397-7838			plattes3@michigan.gov	
laurie.potter@1gec.com				
VS0101351				

CONTRACT SUMMARY			
SAFE DRINKING WATER INFORMATION SYSTEM (SDWIS) AND SUPPORTING SYSTEMS			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE**
May 1, 2021	April 30, 2026	5 - 1 Year	April 30, 2026
PAYMENT TERMS		**DELIVERY TIMEFRAME**	

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☐		☐		April 30, 2026
CURRENT VALUE	**VALUE OF CHANGE NOTICE**	**ESTIMATED AGGREGATE CONTRACT VALUE**		
$2,586,942.57	$37,553.20	$2,624,495.77		

DESCRIPTION
Effective 3/29/2023, the parties add the attached Statement of Work for the purpose of transitioning Michigan's Environment, Great Lakes, and Energy (EGLE) agency's Safe Drinking Water Information System (SDWIS). This will help to prepare data for reporting/dashboard purposes and to purchase and deploy additional GEC applications for managing Public Water Supply data. The State also adds $37,553.20 in funding to support the work. All other terms, conditions, specifications and pricing remain the same. Per Contractor, Agency, DTMB Central Procurement Services and State Administrative Board approval on 08/02/2022.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Page	517-242-4114	PAGER1@michigan.gov

STATEMENT OF WORK – IT Change Notice

Project Title: Contract 210000000877 Change Notice #3 – FY23 PWS Data Management Support	Period of Coverage: Fiscal Year 2023
Requesting Department: EGLE	Date: 08/11/2022
Agency Project Manager: Ronda Page	Phone: (517) 242-4114
DTMB Project Manager: Laura Brancheau	Phone: (517) 335-1334

BACKGROUND:
Michigan's Department of Environment, Great Lakes, and Energy (EGLE)-Drinking Water and Environmental Health Division (DWEHD) has identified additional Public Water Supply (PWS) program data support needs that can be fulfilled by Global Environmental Consulting (GEC) through a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:
The objective of this change notice in relationship to the project is to seamlessly transition Michigan EGLE from its current systems to the Compliance Monitoring Data Portal (CMDP) and Safe Drinking Water Information System (SDWIS) State in preparation for future migration to EPA's cloud hosted version of SDWIS, prepare data for reporting/dashboard purposes and to purchase and deploy additional GEC applications for managing Public Water Supply (PWS) data.

EGLE's DWEHD currently uses multiple systems for managing Safe Drinking Water Act data:

- SDWIS/State is used for the Community Water Supply (CWS) Program.
- WaterTrack is used for the Noncommunity Water Supply (NCWS) Program, and the NCWS program is in the process of migrating data to a separate version of SDWIS/State.
- WaterChem is a separate database which contains a copy of the State Drinking Water Lab data, as well as Noncommunity data received from private labs which are manually entered into WaterChem via WaterTrack.
- Data for the laboratory certification program are housed in another standalone database.

The change items in this change notice include:
- Coordinate migration of NCWS and CWS data and data flows into a single instance of SDWIS State in anticipation of future migration to EPA's cloud hosted version of SDWIS.
- Execute training plans (virtual and in-person) for local health department (LHD) staff, focusing on SDWIS and SWIFT applications.
- Implement CMDP and assist private laboratories with CMDP reporting.
- Synchronize, and maintain the data synchronization engine for CMDP, including installing any updates as EPA releases them.
- Determine which SDWIS views would be feasible for Power BI data models.
- Discuss the capabilities of the GEC applications RECAP−Dashboard [formerly Compliance Manager Dashboard (CMD)] and Drinking Water Viewer (DWV). [Participate in conference calls, provide demos, and answer questions for EGLE about Dashboard and DWV so that EGLE can determine if we want the software]. If it is determined DWV or Dashboard will be used by SOM, we intend to purchase and deploy

the application as a part of this change notice. SOM intends to purchase two separate instances of Dashboard and DWV; one for the CWS program, and one for the NCWS program.

- Host discovery sessions evaluating the feasibility of developing a data validation tool with rapid data entry capability for data flowing into [entering] the SDWIS DB from external sources, and develop the data validation tool.
- Support the State's Governance, Risk and Compliance process for any added application, where it is required (new ATOs).

SCOPE OF WORK:

Change Item 1 (AKA Task 1)

Description: Work with EGLE to combine NCWS and CWS data and data flows into a single instance of SDWIS/State in anticipation of future migration to EPA's cloud hosted version of SDWIS. GEC will create structure set migration files with data from SDWIS NC, and will migrate data to the test version of SDWIS using EPA's MigrateToState application. GEC and EGLE will check over the data in the test version of SDWIS before refreshing the production version of SDWIS. Additional testing will be performed after data are moved to production. GEC will work with the MiLogin team to change the configuration and MiLogin links to ensure that LHDs will still have access to SDWIS.

Target Due Date: 12/31/2023

Background: In order to pursue other items in this change notice such as CMDP, we first need to consolidate our SDWIS environments. NCWS staff, as well as LHDs department staff, are expected to be conducting their everyday work in SDWIS beginning in May 2023. Beginning work to merge the two databases soon after will be essential to pursue private lab electronic data flow (Task 2).

GEC Tasks:

Tasks	Effort Estimate (in hours)
GEC will host calls with EGLE to determine the impact of merging two SDWIS databases and identify areas of concern, coordinate with EGLE NC on the migration process, and biweekly to weekly meetings.	142
Review data in SDWIS NC and SDWIS CWS prior to creating migration structure sets and migrating data to one version of SDWIS	100
Determine best way to standardize data, use of data fields, and SDWIS processes before data migration to test SDWIS	100
Data Transformation	100
Create queries and migration file structure sets for basic inventory (includes water system name, service areas, population, service connections, and some water system indicators) and legal entities	80
Create queries and migration file structure sets for the remainder of the inventory information	80
Create queries and migration file structure sets for TCR samples	100
Create queries and migration file structure sets for LCR and chemical samples	100
Create queries and migration file structure sets for monitoring schedules	100
Create queries and migration file structure sets for compliance schedules	100
Create queries and migration file structure sets for violation and enforcement actions	60
Create queries and migration file structure sets for site visits	40

Tasks	Effort Estimate (in hours)
Migrate all inventory and legal entities	90
Migrate TCR samples	80
Migrate LCR and chemical samples, and monitoring schedules	80
Migrate compliance schedules, violation and enforcement actions, and site visits	95
MiLogin and Configuration for one version of SDWIS	50
Migration Plan, and update other documentation (Training, Testing, Implementation, Configuration plans, etc.)	50
TOTAL	1,547

Assumptions:
- Weekly to bi-weekly calls will be needed to coordinate with the EGLE NC program to combine both versions of SDWIS. Some coordination may be required with CWS staff if SDWIS data fields are used for different purposes by each program, or if lab analytes/methods, or other data fields need to be standardized.
- GEC understands that the NCWS program has been attempting to mirror CWS during their transition from WaterTrack to SDWIS NC, a lot of fields serve similar functions right now and may be easier to merge. Some data transformation may be needed before migrating data into one version of SDWIS.
- Estimates assume that GEC will need to migrate data to one version of SDWIS twice. Once into a test version of SDWIS so EGLE CWS and NC can review the data, and then will need to be migrated into SDWIS production after EGLE reviews and approves of the data in SDWIS test.
- Calls will also be needed to coordinate the cutover from SDWIS NC to the combined version of SDWIS for NC staff and the LHDs. GEC estimates are based on multiple cutovers to using the combined version of SDWIS/State. For example, while inventory data is being migrated to the combined version of SDWIS/State production, inventory updates to SDWIS NC will need to stop momentarily. Once the inventory data has been migrated to the combined version of SDWIS, all inventory changes will need to be made in the combined version of SDWIS NC to avoid data loss or the need for double data entry by NC or LHD staff.
- Additionally, we assume that in this merge internal (EGLE staff) and external (LHD) users will be able to access the SDWIS production database.
- Documentation will be created or updated as requested by DTMB and EGLE, and assumes GEC will respond to one round of comments on the documentation.
- GEC will work with the MiLogin team on reconfiguring the MiLogin set up for NC and LHD staff, and update/add links in SDWIS for LHDs.
- Assumes that one year of TCR, and three to nine years of lead and copper and chemical samples will need to be migrated to the combined version of SDWIS.
- Once both versions of SDWIS are combined, GEC will need to decommission SDWIS NC, and will need to re-evaluate the SDWIS server hosting costs for the project.

Impact: Combining the CWS and NCWS SDWIS databases will allow SDWIS administrative tasks to be consolidated between the two units, as well as federal reporting efforts to EPA.
- This task will require an additional 1,547 in labor hours and $216,529.57 in labor costs using the SME 3 rate.

Change Item 2 (AKA Task 2)

Description: Train NCWS contract staff (LHDs) and SOM staff on SDWIS and SWIFT and provide backup support for SOM for questions from users.

Target Due Date: Before end-of-fiscal-year 2023 (varied dates necessary for training).

Background: EGLE will leverage the domain knowledge GEC has related to SDWIS to develop and provide training to the LHDs to aid in the successful adoption of using SDWIS and SWIFT by the LHDs. **This task is contingent upon LHDs receiving access to GEC products via the alternative VPN option GEC and MiLogin were collaborating on from a previous change notice.**

GEC Tasks:

Tasks	Effort Estimate(in hours)
Execute three in-person training sessions in FY23 with two GEC staff members for two days each. GEC allows 40 hours to integrate their SDWIS/SWIFT training plan with EGLE's draft in-person training plan. The first two in-person trainings will be regional (one in the Upper Peninsula and one in the Lower Peninsula). These trainings will provide in-depth training on SDWIS and SWIFT. There will be an additional in-person training in the Lansing area in late FY23 for LHD staff to reinforce SDWIS and SWIFT skills. This in-person session will reiterate highlights from the virtual sessions, as well as present hands-on demonstration of key points and answer attendees' questions about SDWIS. GEC will provide copies of their agendas for the training plan.	232
Execute the additional 5 virtual training sessions in FY23 that were planned in the FY22 change notice. GEC will facilitate 5 GoToWebinar training sessions about specific rules: RTCR/GWR, DBPs, SWTRs, LCR, Chems which will occur early in FY23. Attendance in one virtual meeting to plan the training scenario is estimated (two people will attend and the PM will coordinate with SOM). Execute (5) 2-hour virtual training sessions. Each virtual session requires two GEC staff on GoTo Webinars. EGLE will be provided with recordings of the trainings for later use as needed. Each session will be scheduled for 2 hours to allow time for questions.	30
Provide post training support to either SOM staff supporting LHDs or LHDs direction, as determined by EGLE. This will include any follow up training sessions, as well as support via GEC Zendesk for questions specific to training. Support will not exceed 65 hours.	65
TOTAL	327

Assumptions:
- Assumes that GEC can repurpose existing training materials, but up to 2 hours per person are needed for the virtual training sessions to: set up specific examples in SDWIS or in a GEC application; plan agendas or scenarios with EGLE, to set up and schedule the webinars, and provide the question and answer excel files from the trainings and a link to the video recording. If additional EGLE-specific customization is required, GEC will utilize the post-training support task for additional effort requested.
- Assumes that each trip will require one GEC staff member at the SME 3 rate and at the Analyst 2 rate. A staff member at the SME 3 rate will provide SDWIS training, and a staff member at the Analyst 2 rate will provide training on GEC applications.
- Assumes that two SME 3 staff members will attend the virtual webinars.
- Assumes that each in person trip is for two full on-site days, and includes three nights of hotel stays, as the availability of flights the morning of, or the evening after the training may be limited.

Impact:
- 327 Additional Hours, total of $51,184.49 in labor and travel costs.
- $40,132.49 Additional Labor Cost in 2023.

- $11,052.00 estimated travel costs including:

- o Three-night hotel stay (two rooms for two people) at the per diem rate of $106 per night per in- person training. This would result in nine total days of board for two people to be paid. Note that additional costs may apply for trainings outside of the Lansing area. GSA Federal Government rates will be used once the location of all three trainings is determined.
- o Rental car ($150 per day for 12 days).
- o Per diem (meals and incidentals) of $48 for first and last travel days and $64 per diem for onsite days for two people. Note that additional costs may apply for trainings outside of the Lansing area. GSA Federal Government rates will be used once the location of all three trainings is determined.
- o Estimated airfare at $900 round trip each for two people.
- o Estimated $100 each for two people for ground transportation or parking.

Change Item 3 (AKA Task 3)

Description: CMDP Transition and Implementation

Target Due Date: 12/31/2023
Background: Previous efforts to implement the use of CMDP included:
- Developing a transition plan.
- Installation and configuration of test and production environments to synchronize data with CMDP.
- Preparing and migrating data into CMDP.
- Documenting, implementing, and testing data flows.
- Began preparation of Training Plans and training materials for EGLE staff and onboarding private labs.

GEC Tasks:

Tasks	Effort Estimate (in hours)
Continue support for on-boarding of private labs. Under a previous contract through ERG, GEC supported EGLE in developing lab on-boarding materials, including drafting website content, path to production standards, and a laboratory survey. GEC anticipates that lab outreach will begin under this Change Notice and this task is to work with onboarding private labs. This estimate assumes 4 hours per lab on average, which is supported by work with other primacy agencies and assumes GEC will support 20 labs.	80
Although SOM has 230 certified labs, not all labs are likely to elect or be convinced to use CMDP. This estimate assumes GEC will Train the Trainers and serve as an option if labs have problems and SOM staff cannot address their issues. GEC will assist SOM staff if they have questions on CMDP or need additional assistance.	50
Assist EGLE in maintaining training materials and developing new training materials, such as holding training webinars, producing training videos, developing quick reference guides, updating FAQs, maintaining CMDP Best Practices, and updating Path to Production documentation.	32
Training for NC and CWS staff – likely 1-2 staff from the NC and CWS programs devoted to CMDP will need refresher training on how to use CMDP, reminder of need for routine password changes, and will need to access GEC with other questions about CMDP as the tool is rolled out.	40
Set up DSE and sync data in test and production. Manage configuration of DSE, manage logs and update the software if new versions are created.	72

Documentation. Create documentation for CMDP and the DSE. This could include Configuration,Testing, Installation, and Training plans. This includes responding to one round of comments from SOM.	50
TOTAL	324

Assumptions: Assumptions for this task include
- The presence of one SDWIS database where NCWS and CWS are carrying out everyday work.
- In 2023, approximately 72 hours will be needed to set up and sync the DSE. In future years, only 32 hours will be required for this task.
- GEC and EGLE will build upon and update existing CMDP training materials, and develop new training materials as needed.
- GEC will update, or create new documentation for CMDP and the DSE, including but not limited to a Training Plan, Testing Plan, Installation, and Configuration Plan documents as required by DTMB.

Impact: Implementation of CMDP would greatly reduce the manual data entry workload of EQAs and LHD staff who currently manually enter sample results into SDWIS. It would also ensure higher quality water sampling data is flowing into the SDWIS database in a timely manner. EGLE would also be able to ensure higher integrity of the chain of custody for water samples.
- A total of 324 hours is anticipated to be used at a labor cost of $45,349.44 for all tasks anticipated to be completed in FY 23.
- The SME 3 rate was used to calculate costs for all tasks.
- Costs for additional years is anticipated to be:
    - FY24: 32 hours at the SME 3 rate and $4.613.33
    - FY25: 32 hours at the SME 3 rate and $4,751.73
    - FY26: 32 hours at the SME 3 rate and $4894.28.

Change Item 4 (AKA Task 4)

Description: Power BI data models (shared services - other states could utilize the views/data models and reports we create) as well as developing and implementing custom reports.

Target Due Date: 6/30/2023

Background: The purpose of this task is to both fill reporting gaps needed for CWS and NCWS that may not be fulfilled by other applications.

GEC Tasks:

Tasks	Effort Estimate (in hours)
GEC will schedule calls (10-hour allocation) to evaluate EGLE reporting and querying needs that could be met via SDWIS views. Two GEC staff will attend each call. The goal will be to pull information, including pulling data from different tables and preserving relationships, to enable EGLE to use those views in Power BI and other reporting tools. GEC will confirm that SDWIS views will not impact performance.	20
GEC will assist in the pulling of information, including pulling data from different tables and preserving relationships, to enable EGLE to use those views in Power BI.	40
Total	60

Assumption: EGLE will provide the business cases that would be best served by SQL views and GEC will create the views in the test and production environments. The SDWIS views will not impact the production database or SDWIS application performance. Assumes that two GEC staff members will each attend up to 10 one-hour calls with EGLE to determine reporting and querying needs.

Impact: Having access to pre-established table relationships would allow both units to publish Power BI reports ata higher frequency.

• An additional 60 hours of labor, and $8,398.04 at the SME 3 rate.

Change Item 5 (AKA Task 5)

Description: Evaluate the Feasibility of Using RECAP−Dashboard and Drinking Water Viewer (DWV) and create action items for implementation once a choice is made. DWV for NC program will be implemented and deployed toproduction for the State and LHDS immediately after a choice is made.

Target Due Date for Discovery: 4/30/2023

Target Due Date for Deployment of Applications to Production: 12/31/2023

Background: To fill necessary gaps in reporting required for business, EGLE is interested in evaluating DrinkingWater Viewer (DWV) and Compliance Manager Dashboard (CMD). Both the CWS and NC programs plan on purchasing separate instances of RECAP−Dashboard and DWV.

GEC Tasks:

Tasks	Effort Estimate(in hours)
Evaluate CMD and DWV for SOM. Hold meetings to discuss interest and answer questions about feasibility after a demo of the products.	10
SEM Documentation	50
NCWS RECAP−Dashboard Perpetual License for 151 to 200 users	$18,000
NCWS RECAP−Dashboard SaaS for FY23 for up to 151 to 200 users	$19,345
NCWS DWV Perpetual License for 101 up to 500 users	$25,000
NCWS DWV SaaS for 101 up to 500 users	$32,800
CWS RECAP−Dashboard Perpetual License for up to 100 users	$18,000
CWS RECAP−Dashboard SaaS for FY23 for up to 100 users	$16,165.00
CWS DWV Perpetual License for 101 up to 500 users	$25,000
CWS DWV SaaS for 101 up to 500 users	$32,800
Total	60

Table A. The SaaS pricing for RECAP−Dashboard (Compliance Manager Dashboard). The yellow highlighted row wasused to determine the cost estimates for the SaaS for the NC program. The blue highlighted row was used to determine the SaaS cost estimates for the CWS Program, and is based on the number of current RECAP users.

RECAP−Dashboard	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
1-5 users	$10,865.00	$11,136.63	$11,415.04	$11,700.42
6-10 users	$11,395.00	$11,666.63	$11,945.04	$12,230.42
11-15 users	$11,925.00	$12,196.63	$12,475.04	$12,760.42
16-20 users	$12,455.00	$12,726.63	$13,005.04	$13,290.42
21-25 users	$12,985.00	$13,256.63	$13,535.04	$13,820.42
26-50 users	$13,515.00	$13,786.63	$14,065.04	$14,350.42
51-75 users	$15,105.00	$15,376.63	$15,655.04	$15,940.42
76-100 users	$16,165.00	$16,436.63	$16,715.04	$17,000.42

RECAP−Dashboard	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
101-125	$17,225.00	$17,496.63	$17,775.04	$18,060.42
126-150	$18,285.00	$18,556.63	$18,835.04	$19,120.42
151-200	$19,345.00	$19,616.63	$19,895.04	$20,180.42
201-250 users	$20,405.00	$20,676.63	$20,955.04	$21,240.42
251-300 users	$21,465.00	$21,736.63	$22,015.04	$22,300.42
301-350 users	$22,525.00	$22,796.63	$23,075.04	$23,360.42
351-400 users	$23,585.00	$23,856.63	$24,135.04	$24,420.42

Table B. The SaaS pricing for Drinking Water Viewer. The yellow highlighted row was used to determine the costestimates for both the CWS and NC programs.

Authorized Users	SaaS FY23	SaaS FY24	SaaS FY25	SaaS FY26
1-5 users	$16,400.00	$16,810.00	$17,230.25	$17,661.01
6-10 users	$17,220.00	$17,650.50	$18,091.76	$18,544.06
11-15 users	$18,860.00	$19,331.50	$19,814.79	$20,310.16
16-20 users	$19,680.00	$20,172.00	$20,676.30	$21,193.21
21-25 users	$20,500.00	$21,012.50	$21,537.81	$22,076.26
26-50 users	$22,960.00	$23,534.00	$24,122.35	$24,725.41
51-75 users	$24,600.00	$25,215.00	$25,845.38	$26,491.51
76-100 users	$28,700.00	$29,417.50	$30,152.94	$30,906.76
101-500 users	$32,800.00	$33,620.00	$34,460.50	$35,322.01
501-1,000 users	$41,000.00	$42,025.00	$43,075.63	$44,152.52

Assumptions: The DWV user license numbers could also include lab staff or PWS staff if necessary. Both the CWSand NC programs will pay separate perpetual license fees for RECAP−Dashboard and DWV since they plan to purchase separate instances of each application. The license fee is invoiced when the environments are being setup. The SaaS fees will be invoiced monthly, as EGLE anticipates that they will be able to combine instances of RECAP−Dashboard and DWV once the separate instances of SDWIS are combined into one version of SDWIS. For example, the monthly SaaS charge for the CWS program for RECAP−Dashboard will be $1,347.08 for up to 12 months, and the monthly SaaS for the NC program would be $1,612.08 for up to 12 months. If at any time duringthe first 12 months, the CWS and NC program switch to using one version of SDWIS, the monthly RECAP SaaS would change to a combined total of $1,788.75 for up to 300 users. and. GEC will provide training as specified in the SaaS agreements for RECAP−Dashboard and DWV. If additional training is needed on these products, GEC canprovide additional training on a T&M basis under an existing training task on the project.

Impact:
- An additional 60 hours in labor and $8,398.04 in labor costs at the SME 3 rate.
- An additional $187,110 in software costs as follows:
  - An additional $18,000 for the Dashboard perpetual license for the NC Program.
  - An additional $18,000 for the Dashboard perpetual license for the CWS Program.
  - An additional $25,000 for the DWV perpetual license for the NC Program.
  - An additional $25,000 for the DWV perpetual license for the CWS Program.
  - An additional $19,345 for the Dashboard SaaS for 2023 for the NC Program.

- An additional $32,800 for the DWV SaaS for 2023 for the NC Program.

- An additional $16,165 for the Dashboard SaaS for 2023 for the CWS Program.
- An additional $32,800 for the DWV SaaS for 2023 for the CWS Program.

Change Item 6 (AKA Task 6)

Description: Data Validation

Tool

Target Due Date: <mark>12/31/2023</mark>

Background: We are in need of more robust data validation processes to prevent low-quality data or results of concern into SDWIS without staff intervention.

GEC Tasks:

Tasks	Effort Estimate (in hours)
GEC will host calls to facilitate discovery sessions, requirements gathering to determine the feasibility of developing a validation tool that performs quality check data validations possibly including but not limited to the following list (all sample analyte types) flowing in from CMDP: –Verifies collection date is present –Verifies collection time is present –Verifies lab receipt date is present -Verifies that sample record has a PWSID associated with it -Verifies if sample is tied to an active schedule –Sampling point required -Verifies sampling point is present –Verifies sample location is present –Lab sample ID less than 20 characters –Is the collection date within accepted range? –Is the lab receipt date within accepted range –Was Lab Receipt performed before Collection Date? –Verifies analysis start date present –Verifies analysis start time present –Is lab analysis date within the accepted range? –Was analysis date before lab receipt date? –Is analysis date before the collection date? –Holding time check? –Lab analyte method certification check? –Check for E. coli result if total coliform result is positive –Separates samples with a comment associated with the result for an EGLE staff member to vet - validation tool identifies trigger-level and maximum contaminant level (MCL) sample results for all analytes to put into a format suitable for an EGLE staff member to receive a priority alert. GEC will work with EGLE to design and refine requirements, and the process flows for the application, and will write user stories for review by EGLE.	80

Host discovery sessions assessing feasibility of creating a means to "hold" lead andcopper samples within the validation tool until all required sampling is complete for a monitoring period, before migrating to SDWIS, to ensure accurate 90th percentile	70

Tasks	Effort Estimate (in hours)
calculations. Allow additional data entry to occur within the validation tool, beforedata migration, to improve ease of data entry by state staff. There may be value in other sample types being "held" for review and/or additional data entry.	
Development of the Data Validator Tool	350
Package Tool to make it available to other states with no licensing fee	80
Testing	50
Documentation	70
Training and User Support	120
Additional Hosting Fee ($100 per month)	$1,200
Total	820

Assumptions: GEC would work with EGLE to develop a data validator tool which would automatically check data quality before samples get entered or accepted into SDWIS. The data validator would hold lead and copper samples until all sampling is complete before allowing the data to migrate to SDWIS. The development would be completed on a T&M basis, not to exceed a total cost of $118,470.10. This includes working with EGLE to determine requirements for the tool, designing the tool and the process flows in the tool, writing user stories for the developers, developing the tool, testing tool development internally, training, and user support, creating documentation, and updating the GEC Knowledge Center. GEC estimates 10 hours per month would be needed fortraining and support on using the tool. GEC assumes that an additional $100 per month will be needed for hosting the application if only one or two SOM staff would routinely use the application. Additional hosting costs may apply if more than a few users are expected to use the tool.

Impact: This would significantly reduce the risk of lower quality data flowing into SDWIS, impacting federalreporting standards and public health risk.

Title Level	Rate	Hours	ODCs	Total
Senior Project Manager	$162.37	315.00		$51,146.02
Developer 3	$129.87	235.00		$30,519.59
Subject Matter Expert 3	$139.97	225.00		$31,492.67
Analyst II	$91.37	45.00		$4,111.82
Additional Hosting			$1,200	$1,200.00
Total		**820.00**		**$118,470.10**

Change Item 7 (AKA Task 7)

- **Description:** Support for Significant Change to ATO

Target Due Date: Ongoing

Background: Should any changes or applications selected above require changes to the ATO, this task allows forthe effort required to obtain the new authorization.
GEC Tasks:

Tasks	Effort Estimate (in hours)
This effort will be needed to answer risk questions and to update plan and strategy documents for: • SWIFT mobile application • RECAP−Dashboard • Drinking Water Viewer (DWV) • Migration of WaterTrack data to SDWIS_NC, and then combining both instances ofSDWIS into one version • Providing alternate access to SDWIS for LHDs once versions of SDWIS are combined. • Data validator	100
Total	100

Assumptions: The goal will be to address all significant changes at one time, reducing overall effort and duration. Itis assumed that a Significant Change will not require the same amount of effort and duration (less) as the original System Security Plan and Authority to Operate. GEC estimated that 50 hours at the Senior Project Manager rate, and 50 hours at the SME 3 rate would be needed for ATO activities.

Impact: Receiving approval of the ATO is a requirement to keep the system in a production environment and to golive with any new applications.
• An additional 100 hours and $15,116.79 in labor costs.

Change Item 8 (AKA Task 8)

Description: Separate Reporting Database

Target Due Date: 4/30/2023
    Background: A separate reporting database would prevent performance issues and allow for a backup versionof the database for disaster recovery. It may also serve as a place to pull Power BI SDWIS views.

    GEC Tasks:

Tasks	Effort Estimate (in hours)
GEC will set up a separate instance of the SDWIS production database for large data pulls. This instance of the database can be used by SOM staff pulling data for Power BI and other data needs without affecting SDWIS database performance for all other SOMusers. This database instance would sync up with data from SDWIS production every 15minutes. • The cost would be $500 per month, plus 40 hours would be needed to set upand test the database. • To be used for Disaster Recovery.	40
Total	40

Assumptions: Data will be replicated on a near-live basis. Any issues that may arise and impact reporting uses willbe reported to EGLE in a timely manner.
Impact: Will provide EGLE with a near-live data source for reporting and querying purposes.
• An additional 40 hours and $6.494.73 in labor costs at the Senior Project Manager level.

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- An additional $500 per month in hosting costs, or $6,000 for one year.

DELIVERABLES:
Deliverables will not be considered complete until the Agency Project Manager has formally accepted them. Deliverables for this project include:

Deliverable Name	Description
Task 1: Merging CWS and NCWS SDWIS Databases	Project Management activities including notes delivered to DTMB project manager weekly, or on a reduced schedule as approved by the EGLE project owner. Includes updates on migration progress during the merge and addressing potential changes to business as a result for SOM. Deliverables: • Migration plan • Updates to existing, or creating new Implementation, Configuration, Training, and Testing Plans
Task 2: Training focused on LHD Staff for SDWIS and SWIFT	Deliverables: SDWIS/SWIFT training before end of FY23 fiscal year Updated Training Plan Work products: Training agendas will be provided. Some limited training materials may be created, but SDWIS training is generally done with a live demo of how SDWIS works. Targeted audience is LHD on SDWIS NC; GEC will provide recordings of trainings for EGLE to use later as needed.
Task 3: CMDP Transition and Implementation	Deliverables may include updates to training materials developed under another contract and webinar recordings of any training sessions conducted. Will include updates to existing, or creating new: Implementation, Configuration, Training, and Testing Plans.
Task 4: Power BI Views	Assistance in developing or creating the views.

Task 5: GEC Compliance Manager Dashboard and Drinking Water Viewer	Provide access to RECAP−Dashboard and/ or DWV for staff as requested by SOM. Deliverables: • Functional DWV and RECAP−DASHBOARD production environments for the NC and CWS Programs. • DWV and RECAP−Dashboard Implementation Plan • DWV and RECAP−Dashboard Configuration Plan • DWV and RECAP−Dashboard Training Plan • DWV and RECAP−Dashboard Testing Plan

Deliverable Name	Description
	Work Products: • Consulting assistance, conference call, answer questions from SOM • Documentation of processes, either by updating existing or creating new • Will provide a summary document of the DWV and other GEC products analysis and findings, or notes from question-and-answer sessions.
Task 6: Data Validation Tool	Deliverables: • Data Validation Tool Work Products: • Provide updates on conference calls with EGLE describing the gathering of requirements and feasibility of meeting the suggested data-check criteria. • Maintain OneNote notebook with notes from calls. • Copy of user stories or design materials • Data Validation Tool • Tool documentation and information in the Knowledge Center • Training and user support
Task 7: Support for Significant ATO Changes –LHD access, SDWIS for LHD FY 22	Assistance with answering risk questions based on information entered into Keylight for this change notice. May include delivering additional policies, or crosschecking policies already submitted under the first ATO.
Task :8 Separate Reporting Database	Deliverable is the separate SDWIS reporting database for data pulls.
Task 9: Savings from the Original Contract and CN2.	Savings from Original Contract for opting out of implementing Cert Tracker for both Drinking Water and Waste Water: • $162,390 (Cert Tracker – Drinking Water) • $152,439 (Cert Tracker – Waste Water) Savings from CN2 for not hiring a Temporary Contract Employee to focus on the WaterTrack to SDWIS Transition. • $310,689 (CN2 – Task 7) **Total Savings: $625,518**

ACCEPTANCE CRITERIA:
Acceptance criteria for the deliverables include:
• All written deliverables will be written clearly in plain language.
• For CMDP, GEC has trained the laboratories on using CMDP, and demonstrated that the data flow is working properly and ready for use.

- For the data validation tool, the tool accurately validates data before migration to SDWIS.
- Both DWV and RECAP−Dashboard are working in the production environment.

The table below shows a summary of total expected costs for Change Notice 3 for FY23.

Change Item No.	LOE	Labor Cost	Other Direct Costs	Total Labor Costand ODCs
Change Item 1	1,547.00	$216,529.57	$0.00	$216,529.57
Change Item 2	327.00	$40,132.49	$11,052.00	$51,184.49
Change Item 3	324.00	$45,349.44	$0.00	$45,349.44
Change Item 4	60.00	$8,398.04	$0.00	$8,398.04
Change Item 5	60.00	$8,398.04	$187,110.00	$195,508.04
Change Item 6	820.00	$117,270.10	$1,200.00	$118,470.10
Change Item 7	100.00	$15,116.79	$0.00	$15,116.79
Change Item 8	40.00	$6,494.73	$6,000.00	$12,494.73
Change Item 9		$-378,491	$-247,027	$-625,518
Total	**3,278.00**	**$79,198.2**	**$-41,665**	**$37,553.2**

Time & Materials Hourly Rate Card:
For reference. The GEC time and materials hour rate card was amended with Change Notice #1.

GEC Staff Description	GEC T&M Hourly Rates				
	2022	2023	2024	2025	2026
Program Manager	$146.92	$155.87	$160.54	$165.36	$170.32
Senior Project Manager	$153.05	$162.37	$167.24	$172.26	$177.42
Developer 3	$122.42	$129.87	$133.77	$137.78	$141.91
Web Designer 2	$77.82	$77.26	$79.57	$81.96	$84.42
Subject Matter Expert 3	$131.93	$139.97	$144.17	$148.49	$152.95
Subject Matter Expert 3	$122.42	$129.87	$133.77	$137.78	$141.91
Analyst III	$101.27	$107.44	$110.66	$113.98	$117.40
Analyst III	$86.13	$91.37	$94.12	$96.94	$99.85
Analyst III	$60.65	$64.34	$66.27	$68.26	$70.31
Senior Data Specialist	$74.82	$79.38	$81.76	$84.21	$86.74

Attachment 1: Drinking Water Viewer SaaS Agreement Summary

1.0 License Fee		
1.1	Duration of contract	Cloud based web application.
1.2	period	Hosted within the Microsoft Azure Government Cloud.
2.0 Initial Project Set-Up Assistance		
2.1	10 hours	GEC allots 10 hours to set up the product.
2.2	2 hours	GEC provides 2 one-hour training sessions via webinars to show DWV administrators how to use the application.
2.3	30 days – 1 year	30 days is GEC's minimum timeline for implementation of the application but roll-out may require up to one year based on agency's schedule (and an approved ATO from DTMB to go to production.)
3.0 Covered over Contract Period		
3.1	Users	Number of users defined in agreement.
	5 hours/ software version update	GEC deploys periodic software updates.
3.2	Duration of contract period	Regularly address issues identified throughout the year through routine maintenance, reports and requests from users, and automatic error-reporting feature built into our software. Fixes may be resolved by phone, email, or software updates.
3.3		Forward-compatible support for the modernized SDWIS: GEC will ensure your application works with the modernized SDWIS when it is ready.
4.0 Ongoing Support		
4.1	Duration of contract period	Phone support available weekdays from 9:00 am – 5:00 pm MST (480) 827-9827.
4.2		24 x 7 access to GEC's complete knowledge center and user community https://gecsws.zendesk.com.
4.3		Emailing support@1gec.com generates a help desk ticket. GEC responds to tickets in under four hours during normal business hours and strives to resolve requests as quickly as possible. The nature of the request determines the length of time to resolve the request.
4.4		Deployment webinars for every major deployment, including a summary of the enhancements made, and additional training on new features.
5.0 Additional Services are available as add-ons to the contract. Labor costs are provided on an hourly basis and can either be added as Time and Materials tracking or as an option to purchase blocks of time at a fixed price.		
5.1	Additional users	Adding users is a modest increase in contract price.
5.2	Additional training (on a Time and Materials basis)	Via webinar: helpful for onboarding new staff or if users need a refresher course.
5.3	Web Services	New database connections.

Attachment 2: RECAP−Dashboard SaaS Agreement Summary

1.0 License Fee		
1.1	Duration of	Cloud based web application.
1.2	subscription	Hosted within the Microsoft Azure Government Cloud.
2.0 Initial Project Set-Up Assistance		
2.1	10 hours	GEC allots 10 hours set up the application.
2.3	8 hours	GEC provides four two-hour training sessions via webinars to show users and administrators how to use the application.
2.4	30 days – 1year	30 days is GEC's minimum timeline for implementation of the application but roll-out may require up to one year based on agency's schedule (and an approved ATO from DTMB to go to production.)
3.0 Annual Maintenance		
3.1	5 hours/ update	GEC deploys periodic software updates.
3.2	Annual	Regularly address issues identified throughout the year through routine maintenance, reports and requests from users, and automatic error-reporting feature built into our software. Fixes may be resolved by phone, email, orsoftware updates.
3.3		Forward-compatible support for the modernized SDWIS: GEC will ensure your application works with the modernized SDWIS when it is ready.
4.0 Ongoing Support		
4.1	Annual	Phone support available weekdays from 9:00 am – 5:00 pm MST (480) 827-9827.
4.2	Annual	24 x 7 access to GEC's complete knowledge center and user community https://gecsws.zendesk.com.
4.3	Annual	Emailing support support@1gec.com generates a help desk ticket. GEC responds to tickets in under four hours during normal business hours and strives to resolve requests as quickly as possible. The nature of the request determines the length of time to resolve the request.
4.4	Annual	Deployment webinars for every major deployment, including a summary of the enhancements made, and additional training on new features.
5.0 Additional Services are available as add-ons to the subscription and annual SaaS fees. Labor costs are provided on an hourly basis and can either be added as Time and Materials tracking or as anoption to purchase blocks of time at a fixed price.		
5.1	Additional users	Adding users is a modest increase in subscription price.
5.2	Additional training (on a Time and Materials basis)	Via webinar if users need a refresher course.
5.3	Web Services	New database connections.
5.4	Custom functionality	Developing state-specific functionality (e.g., creating additional features in RECAP−Dashboard that would meet the requirements of state-specific needs).

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PROJECT CONTROL AND REPORTS:

A bi-weekly progress report must be submitted to the Agency and DTMB Project Managers throughout the life of this project. This report may be submitted with the billing invoice. Each bi-weekly progress report must contain the following:

1. **Hours**: Indicate the number of hours expended during the past two weeks, and the cumulative total to date for the project. Also state whether the remaining hours are sufficient to complete the project.
2. **Accomplishments**: Indicate what was worked on and what was completed during the current reporting period.
3. **Funds**: Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

SPECIFIC DEPARTMENT STANDARDS:

Agency standards, if any, in addition to DTMB standards.

PAYMENT SCHEDULE:

Payment will be made on a Time and Materials basis monthly for all items in the Scope of Work except the License and SaaS payments for GECSWS. The license and first annual SaaS payments will be made on the following schedule.

- DWV: EGLE is invoiced for the perpetual license as soon as EGLE is provided access to DWV in the Test environment or the server is provisioned, whichever is sooner. (GEC will coordinate with SOM to ensure the timing of the latter matches their preference.) The SaaS will be invoiced monthly for up to 12 months.
- RECAP−Dashboard: EGLE is invoiced for the perpetual license as soon as EGLE is provided access to RECAP−Dashboard or the server is provisioned, whichever is sooner. (GEC will coordinate with SOM to ensure the timing of the latter matches their preference.) The SaaS will be invoiced monthly for up to 12 months.

DTMB will pay CONTRACTOR upon receipt of properly completed invoice(s) which shall be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices should reflect actual work completed by payment date, and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices shall describe and document to the State's satisfaction a description of the work performed, the progress of the project, and fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense. Payment shall be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

PROJECT CONTACTS:

The designated Contractor Project
Manager is: Name Kim Clemente
Department Project Manager
Address 3370 N Hayden Rd, Suite
123-302 City/State/Zip Scottsdale AZ,
85251 Phone Number 407-720-0477
Email Address: kim.clemente@1gec.com

Kim will serve as the primary contact with regard to services who will have the authority to act on behalf of the Contractor in matters pertaining to the implementation services.

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The designated Agency Program
Manager is:
Ronda Page
Department: EGLE
Area: DWEHD
Building/Floor:
Con Hall
Street Address:
525 W. Allegan
City/State/Zip:
Lansing, MI 48933
Phone Number: 517-242-4114
Email Address: pager1@michigan.gov

Name [OBJ] :
Dana DeBruyn
Department [OBJ]: EGLE
Area [OBJ] : DWEHD
Building/Floor [OBJ] Constitution Hall, 4th Floor, South Tower
Address [OBJ] : 525 W. Allegan
City/State/Zip [OBJ] : Lansing, MI 48933
Phone Number [OBJ]: 517-930-6463
Email Address [OBJ] : debruynd@michigan.gov

Dana DeBruyn will serve as the primary contact with regards to EGLE items and she will have the authorization to act on behalf of Ronda Page in matters pertaining to the SOM EGLE items, while Ronda Page is out of the office.

The designated DTMB Program
Manager is:
Name: Laura Brancheau
Department DTMB
Area: Agency Services Supporting EGLE, DNR, MDARD & DMVA
Building/Floor: Constitution Hall, 1st Floor, North Tower
Address 525 W. Allegan
City/State/Zip Lansing, MI 48933
Phone Number: 517-335-1334
Email Address: brancheaul@michigan.gov

AGENCY RESPONSIBILITIES:
GEC will need assistance from SOM in setting up conference calls with appropriate staff for appropriate tasks and will need to coordinate closely with SOM staff on all tasks.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:
Contractor staff will work at the GEC offices located in Scottsdale, AZ.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:
Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of

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8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing. No overtime will be permitted.

CONTRACT CHANGE NOTICE

Change Notice Number **2**

to

Contract Number **210000000877**

<table>
<tr>
<td rowspan="7">CONTRACTOR</td>
<td>Global Environmental Consulting, Inc</td>
<td rowspan="7">STATE</td>
<td>Program Manager</td>
<td>Various</td>
<td>EGLE</td>
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<tr>
<td>3370 N. Hayden Road</td>
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<td></td>
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</tr>
<tr>
<td>Scottsdale, AZ 85251</td>
<td rowspan="4">Contract Administrator</td>
<td>Sarah Platte</td>
<td>DTMB</td>
</tr>
<tr>
<td>Laurie Potter</td>
<td colspan="2">517-219-2406</td>
</tr>
<tr>
<td>603-397-7838</td>
<td colspan="2" rowspan="2">plattes3@michigan.gov</td>
</tr>
<tr>
<td>laurie.potter@1gec.com</td>
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<tr>
<td>VS0101351</td>
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CONTRACT SUMMARY			
SAFE DRINKING WATER INFORMATION SYSTEM (SDWIS) AND SUPPORTING SYSTEMS			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE**
May 1, 2021	April 30, 2026	5 - 1 Year	April 30, 2026
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
ALTERNATE PAYMENT OPTIONS			**EXTENDED PURCHASING**
☐ P-Card ☐ PRC ☐ Other			☒ Yes ☐ No
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☐		☐		April 30, 2026
CURRENT VALUE	**VALUE OF CHANGE NOTICE**	**ESTIMATED AGGREGATE CONTRACT VALUE**		
$1,534,892.00	$1,052,050.57	$2,586,942.57		

DESCRIPTION
Effective 8/02/2022, the parties add the attached Statements of work, for the purpose of providing data management support for the Public Water Supply program, which includes Increasing the monthly operating support hours from 24 to 60. An additional $1,052,050.57 is also being added to the Contract, in order to support the additional scope being added. All other terms, conditions, specifications and pricing remain the same. Per Contractor, Agency, DTMB Central Procurement Services and State Administrative Board approval on 08/02/2022.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Page	517-242-4114	PAGER1@michigan.gov

STATEMENT OF WORK – IT Change Notice

Project Title: **Contract 210000000877 Change Notice #2 – PWS Data Management Support**	**Period of Coverage:**
Requesting Department: **EGLE**	**Date:**
Agency Project Manager: **Ronda Page**	**Phone:** **(517) 242-4114**
DTMB Project Manager: **Laura Brancheau**	**Phone:** **(517) 335-1334**

BACKGROUND:
EGLE-DWEHD has identified additional Public Water Supply (PWS) program data support needs that can be fulfilled by Global Environmental Consulting (GEC) through a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:
The objective of this change notice in relationship to the project is to provide additional consulting services and SaaS licensing closely tied to the contract services and supported applications. Specifically, supporting EGLE's Noncommunity Water Supply (NCWS) program through multiple phases of a transition to using the same instance of SDWIS as Community Water Supply (CWS) program prior to the migration to the cloud version of SDWIS (SDWIS "Next").

The change items in this change notice include:
- Guide and assist EGLE in migrating data from WaterTrack into SDWIS State NC and in setting up SDWIS administrative functions.
- Assist with establishing a daily flow of electronic sampling information to SDWIS databases (NC & CWS) from the EGLE lab's new LIMS (Promium Element) when it becomes available at the end of calendar year 2022.
- Deploy SWIFT NC <u>by October 2022</u> for LHDs and SOM staff and assist in evaluating and deploying SWIMR or other GEC products to help the NCWS Program address gaps in database and software functionality resulting from the transition out of WaterTrack to SDWIS**.**
- Train NCWS contract staff (local health departments) and SOM staff on SDWIS and SWIFT and provide backup support for SOM for questions from users.
- Assist with preparing a bi-directional data flow between SDWIS databases (NC & CWS) and the Michigan Environmental Health and Drinking Water Information System (MIEHDWIS) allowing LHD and EGLE employees to carry out work activities using current water supply inventory, contact, and compliance monitoring.
- Ensure Local Health Department access to GEC-hosted applications.
- Employ a GEC contract employee from August 1, 2022 through July 31, 2024 to continue with the NCWS program's IT Modernization effort.

Meeting the upcoming data migration tasks and deadlines while training State and LHD regulators on the new systems is critical to avoid gaps in public health protection.

SCOPE OF WORK:
Change Item 1 (AKA Task 1)

Description: Guide and assist EGLE in migrating data from WaterTrack into SDWIS State NC and in setting up SDWIS administrative functions.

Target Due Date: October 2022

Background: WaterTrack is currently used to support the NCWS program. Local health departments are daily users, reviewing data on water supplies and entering sample results. In addition, EGLE NCWS program staff review related data to support program compliance. On a quarterly basis, a snapshot of data from WaterTrack is loaded into an instance of SDWIS State to support reporting of NCWS program data to the EPA. EGLE's longer term objective is to have both CWS and NCWS share one instance of SDWIS in preparation for the migration to the anticipated next generation of SDWIS (currently under development by the EPA).

WaterTrack is a legacy application and will no longer be supported on its current operating system at the end of 2022. As an interim phase of the migration to the next generation of SDWIS, EGLE is planning to migrate common data from WaterTrack to SDWIS, consider additional enhancements for related gaps in another EGLE application, Michigan Environmental Health and Drinking Water Information System (MiEHDWIS), and have local health departments start to use SDWIS State.

EGLE needs consulting services to aid in the data analysis, mapping, and migration from WaterTrack to SDWIS, as well as the best approach for configuration and setup of a SDWIS NCWS instance to support the longer-term goal of transition to the next generation of SDWIS.

GEC Tasks:

Tasks	Effort Estimate (in hours)
• Participate in new meetings specific to these efforts; 2 GEC staff attending weekly 1-hour meetings for a duration of three months. • These check in calls will be used to review WaterTrack data fields, assist with creating a migration plan for WaterTrack data, and to ensure that progress on the project is made every week during the transition. Additional calls may be required and are included in the estimates for the other tasks as described below.	24
• Consult and support determination of best practices for the configuration of SDWIS to support NCWS. • Evaluate the SDWIS NC database to aid in the determination of how much historical data will be migrated. • Analyze WaterTrack and SDWIS NC to prepare for a migration of NC inventory, sample schedules, compliance schedules, sample data, violations, enforcements and site visits into SDWIS. Will include calls with EGLE NC staff to discuss changes and migration.	100

Tasks	Effort Estimate (in hours)

• Provide guidance in the WaterTrack transition to, and setting up of, SDWIS NC that has relevance to the eventual integration of NCWS and CWS into the single instance of SDWIS State. Preparation to combine both databases will be occurring in the future. Phase I will include:
   o Add EGLE in as the primacy agency in NC & CWS.
   o Change or combine analyte groups that are in NC or CWS, as we do not want to add in duplicate sets with duplicate names.
   o Communicate with CWS and NC staff to review and agree upon the changes.
   o Conduct quality assurance (QA) reviews for analyte groups, support for EGLE cleanup of data, and setup of migration processes in a test environment.
   o Prepare documentation of the migration plan.
	100

• Provide guidance in the WaterTrack transition to, and setting up of, SDWIS NC that has relevance to the eventual integration of NCWS and CWS into the single instance of SDWIS State. Preparation to combine both databases will be occurring in the future. Phase II will include:
   o Review indicators to make sure they are set up correctly in SDWIS.
   o Reconcile the monitoring periods between NC and CWS, including same naming convention.
   o Communicate with CWS and NC staff to review and agree upon the changes.
   o Conduct quality assurance (QA) reviews for indicators and monitoring periods, support for EGLE cleanup of data, and setup of migration processes in a test environment. Prepare documentation of the migration plan.
	100

• Provide guidance in the Water Track transition to, and setting up of, SDWIS NC that has relevance to the eventual integration of NCWS and CWS into the single instance of SDWIS State. Preparation to combine both databases will be occurring in the future. Phase II will include:
   o Clean up legal entities in SDWIS CWS and SDWIS NC, e.g., some appear in both instances, but with different names, communicate with CWS and NC staff or participate in meetings to discuss the legal entities.
   o Conduct quality assurance (QA) reviews, support for EGLE cleanup of data, and setup of migration processes in a test environment. Prepare documentation of the migration plan.
	100

TOTAL	424

Assumptions:
- Assumes work will be completed in three months, using the 2022 SME contract rate of $131.93 per hour.
- Includes additional costs beginning in July 2022 (before training is to begin in August 2022 under another task) for SDWIS NC to increase the number of users to 150 users in the GEC

portal and provide additional bandwidth and data usage for SDWIS to ensure environment reliability and availability.

- This task does not include combining the final NC SDWIS database with the CWS SDWIS database.
- If SDWIS NC and SDWIS CWS are combined, the additional server hosting fee will still apply to accommodate the additional bandwidth and server space; however, GEC will review economies of scale to re-price the combined Server Hosting Fees at such time.

Impact:
- 424 Additional Hours in 2022
- $55,939.46 Additional Labor Cost in 2022, using the 2022 SME contract rate of $131.93 per hour
- $1,641 Additional Server Hosting Fees per month to accommodate additional SDWIS users in the 2022, $1,690.23 per month in 2023, $1,740.94 per month in 2024, $1,793.17 per month in 2025, and $1,846.96 per month in 2026 . Assumes start date of July 2022 for this added cost.

Server costs are shown in the table below.

2022			2023			2024			2025			2026			
Cost Per Month	No. of Months	2022 Total	Cost Per Month	No. of Months	2023 Total	Cost Per Month	No. of Months	2024 Total	Cost Per Month	No. of Months	2025 Total	Cost Per Month	No. of Months	2026 Total	Total
$1,641.00	6	$9,846.00	$1,690.23	12	$20,282.76	$1,740.94	12	$20,891.24	$1,793.17	12	$21,517.98	$1,846.96	4	$7,387.84	$79,925.82

Change Item 2 (AKA Task 2)

Description: Assist with establishing a daily flow of electronic sampling information to SDWIS databases (NC & CWS) from the EGLE lab's new LIMS (Promium Element) when it becomes available at the end of calendar year 2022.

Target Due Date: End of Calendar year 2022

Background: State and private labs currently have limited options for the provision of data results to the State for inclusion in evaluation and EPA reporting. EGLE will leverage GEC's domain knowledge in this area to evaluate data flow options and tools to support both State and private labs in providing data results to EGLE for both NCWS and CWS.

GEC Tasks:

Tasks	Effort Estimate (in hours)

• Assist state drinking water lab with creating a process to send lab data from Promium Element 7 directly to SDWIS State. .
     o GEC can help EGLE and Promium map out the process for the lab and support implementation of the new data export method.
     o
     o GEC will need to help set up the infrastructure and configure XMLSampling to handle data files coming from potentially multiple sources (e.g., state and private labs via SWEET products). A schedule for running XML Sampling may be needed.
     o GEC will need to train EGLE on how to use XML Sampling and how to deal with data errors.
	100

• Assist state drinking water lab, their vendor, and the Department of Technology, Management, and Budget(DTMB) to develop an electronic, daily flow of sample data to SDWIS (NC and CWS).
     o Promium will need access to the current inventory from SDWIS and will send over a modified XML file to match how the data are structured in the state lab's Element software (accommodates the MI LCR's 1st and 5th liter sampling requirement).
     o Will need two separate files and data paths for NC & CWS.
	100

• Assist in evaluating the potential role of SWEET PC and SWEET Central in regular loading of private lab sample data into SDWIS (NC and CWS) o If appropriate, assist in planning for deployment of SWEET products in FY2023. (If SWEET is purchased, training and implementation will be in included in the SWEET License Agreement, and a cost estimate for SWEET PC or SWEET Central will be provided.)	40
TOTAL	240

Assumptions:
- None

Impact:
- 240 Additional Hours using the 2022 contract rates, assuming all work will be completed by December 2022. 125 hours is at the Senior Project Manager rate, and 115 hours is at the SME3 rate.
- $34,303.22 Additional Labor Cost in 2022.

Change Item 3 (AKA Task 3)

Description: Deploy SWIFT NC by October 2022 for LHDs and SOM staff and assist in evaluating and deploying SWIMR or other GEC products to help the NCWS Program address gaps in database and software functionality resulting from the transition out of WaterTrack to SDWIS.

Target Due Date: End of Calendar year 2022

Background: The NCWS is in need of its own instance of SWIFT with use of its own instance of SDWIS State. In addition, once the NCWS program data is available in SWIFT, there may be additional GEC products of benefit to meet EGLE program needs. GEC services are needed to implement SWIFT for NCWS, as well as to support review and analysis of reporting tools to support the NCWS program needs.

GEC Tasks:

Tasks	Effort Estimate (in hours)
• Conduct implementation planning for SWIFT to include confirmation of training, SEM documentation, and production configuration for EGLE NC. • May include a few phone calls and coordination between GEC and DTMB project managers.	24
• Complete implementation tasks for SWIFT to include, ATO significant change activities.	50

• Complete related SEM documentation for a SWIFT instance for NCWS using the SWIFT instance of SDWIS State.
    ○ Configuration Plan
    ○ Implementation Plan
    ○ Training Plan
    ○ Test Plan and Test Results
	50

• Conduct SWIFT training for both LHD users and SOM staff, above what is included in the SaaS agreement (and not included in the on-site training in another task). The SWIFT SaaS provides 74 hours of training, including 10 hours for admin training related to the question set; 10 hours for IT staff; 40 hours with state admins to create 5 customized letters; (4) 2-hour training sessions for users, (2) 3- hour of additional training sessions for state admins)	20
• Provide consulting services to evaluate reporting options for NCWS, to include evaluation of SWIMR. Provide a summary document of the analysis and findings.	50
TOTAL	194

Assumptions:
- SaaS licensing for SWIFT for up to 150 users is a separate instance of SWIFT that is used by the NC program. If SDWIS NC and SDWIS CWS are combined into one version of SDWIS, GEC will work with EGLE to reprice the software SaaS agreement based on the total number of users for the combined programs.
- SaaS licensing for SWIMR for up to 120 users (assuming determination to use SWIMR for reporting) is a separate instance of SWIMR that is used by the NC program. If SDWIS NC and SDWIS CWS are combined into one version of SDWIS, GEC will work with EGLE to reprice the software SaaS agreement based on the total number of users for the combined programs.

The tables below show the service agreements for SWIFT Surveys and SWIMR so EGLE can determine whether additional training may be needed.

1.0 SWIFT Surveys License Fee		
1.1	Duration of	Base price includes up to 150 users.
1.2	subscription	Includes Cloud-based web and mobile application.
2.0 Initial Project Set-Up Assistance		
2.1	10 hours	GEC provides 10 hours of training to your state project administrators, which includes review of a template to help develop the sanitary survey question sets. Training may include phone calls or webinars.
2.2	10 hours	GEC allots 10 hours to work with your IT team to ensure the product can be successfully accessed and updated with state IT systems.
2.3	40 hours	GEC provides 40 hours to work with your state project administrators to create the following five customized and branded report templates: site visit letter; field report; checklist report; inventory change report; and preliminary site visit report.
2.4	8 hours	GEC provides two four-hour training sessions via webinars to show users how to use the application.
2.5	6 hours	GEC provides two three-hour training sessions for your state project administrators which includes instructions on maintaining templates, associating SDWIS deficiencies to components, and managing users.
2.6	90 days – 1 year	90 days is GEC's minimum timeline for implementation of the application but roll-out may require up to one year based on agency's schedule.
3.0 Annual Software as a Service Fees		
3.1	5 hours/ update	GEC works with your IT staff to successfully deploy periodic software updates.
3.2	Annual	Regularly address issues identified throughout the year through Routine Maintenance, reports and requests from users, and automatic error-reporting feature built into our software. Fixes may be resolved by phone, email, or software updates.
3.3		Forward-compatible support for the modernized SDWIS: GEC will ensure your application works with the modernized SDWIS when it is ready, and as outlined in your Transition Plan.

4.0 Ongoing Support		
4.1	Annual	Phone support available weekdays from 9:00 am - 5:00 pm MST (480) 827-9827
4.2	Annual	24 x 7 access to GEC's complete knowledge center and user community https://gecsws.zendesk.com.
4.3	Annual	Emailing support support@1gec.com generates a help desk ticket. GEC responds to tickets in under four hours during normal business hours and strives to resolve requests as quickly as possible. The nature of the request determines the length of time to resolve the request.
4.4	Annual	Deployment webinars for every major deployment, including a summary of the enhancements made, and additional training on new features.
4.5	Annual	In addition to the services listed above, GEC allots 120 hours for general support for state-specific requests or issues, e.g., one-on-one training.
5.0 Additional Services are available as add-ons to the standard Perpetual License and annual SaaS fees. Labor costs are provided on an hourly basis and can either be billed as Time and Materials or as an option to purchase blocks of time at a fixed price.		

5.1	Additional users	Adding users is a modest increase in subscription price with significant discounts applied.
5.2	Mobile App	iOS and Windows Mobile apps for offline use. (New products under development will be both online and offline.)
5.3	Additional training (on a Time and Materials basis)	Via webinar or an on-site visit; helpful for onboarding new staff or if users need a refresher course.
5.4	Custom functionality	Developing state-specific functionality (e.g., creating additional features in SWIFT that would meet the requirements of state-specific needs).
5.5		Developing state-specific templates and reports not included in 2.3 above, e.g., if a client wants us to maintain their template, update their template, or create an entirely new template or report, additional fees may apply.

1.0 SWIMR License Fee		
1.1	Duration	Base price includes up to 120 users.
1.2	and limits of	Includes Cloud based web application.
1.3	subscription	SWIMR Buddy companion application.
2.0 Initial Project Set-Up Assistance		
2.1	10 hours	GEC allots 10 hours to work with your IT team to ensure the product can be successfully accessed and updated with state IT systems.
2.2	40 hours	GEC provides 40 hours to work with your state project administrators to design five (5) custom reports within the following domains: inventory, samples, monitoring, violations, and enforcement.
2.3	8 hours	GEC provides four two-hour training sessions via webinars to show users and administrators how to use the application.
2.4	90 days – 1 year	90 days is GEC's minimum timeline for implementation of the application but roll-out may require up to one year based on agency's schedule.
3.0 Annual Maintenance		
3.1	5 hours/ update	GEC works with your IT staff to successfully deploy periodic software updates.
3.2	Annual	Regularly address issues identified throughout the year through Routine Maintenance, reports and requests from users, and automatic error-reporting feature built into our software. Fixes may be resolved by phone, email, or software updates.
3.3		Forward-compatible support for the modernized SDWIS.
4.0 Ongoing Support		
4.1	Annual	Phone support available weekdays from 9:00 am - 5:00 pm MST (480) 827-9827.
4.2	Annual	24 x 7 access to GEC's complete knowledge center and user community https://gecsws.zendesk.com.
4.3	Annual	Emailing support support@1gec.com generates a help desk ticket. GEC responds to tickets in under four hours during normal business hours and strives to resolve requests as quickly as possible. The nature of the request determines the length of time to resolve the request.

4.4	Annual	Deployment webinars for every major deployment, including a summary of the enhancements made, and additional training on new features.
4.5	Annual	In addition to the services listed above, GEC allots 120 hours for general support for state-specific requests or issues.
5.0 Additional Services are available as add-ons to the subscription and annual maintenance fees. Labor costs are provided on an hourly basis and can either be added as Time and Materials tracking or as an option to purchase blocks of time at a fixed price.		
5.1	Additional users	Adding users is a modest increase in subscription price with significant discounts applied.
5.2	Additional training (on a Time and Materials basis)	Via webinar or an on-site visit; helpful for onboarding new staff or if users need a refresher course.
5.3	Webservices	New database connections.
5.4	Custom functionality	Developing state-specific functionality (e.g., creating additional features in SWIMR that would meet the requirements of state-specific needs).
5.5		Developing state-specific reports not included in 2.2 above.

Impact:
- 194 Additional Hours
- $26,017.24 Additional Labor Cost in 2022
- $64,000 SWIFT NC license for up to 150 users
- $77,292.16 for SWIFT NC SaaS for up to 150 users for the first 12 months
- $39,000 for SWIMR NC license for up to 120 users
- $48,260.64 for SWIMR NC SaaS for up to 120 users for the first 12 months

Change Item 4 (AKA Task 4)

Description: Train NCWS contract staff (local health departments) and SOM staff on SDWIS and SWIFT and provide backup support for SOM for questions from users.

Target Due Date: Before October 2022

Background: The transition from using WaterTrack to using SDWIS for the LHDs will introduce both changes in the applications used to work with NCWS data as well as changes to the overall data flow for NCWS related data. EGLE will leverage the domain knowledge GEC has related to SDWIS to develop and provide training to the LHDs to aid in the successful adoption of using SDWIS by the LHDs.

GEC Tasks:

Tasks	Effort Estimate (in hours)
• Prep training sessions for FY22 - GEC will prepare training materials for multiple SDWIS training sessions for NCWS SOM staff and LHD staff. Presume 5 sessions for overarching activities, e.g., inventory, compliance schedules (including PN), monitoring schedules, violations, site visits in FY22. These will serve as a precursor to an in-person training event in late FY22. Attendance in one meeting to plan the training scenario is estimated (two people will attend and the PM will coordinate with SOM).	53
• Execute (5) 2-hour virtual training sessions Each virtual session requires two GEC staff on GoTo Webinars. EGLE will be provided with recordings of the trainings for later use as needed. Each session will be scheduled for 2 hours to allow time for questions.	35
• Execute one in-person training in FY22 for two GEC staff for two days. GEC allows 40 hours to integrate their SDWIS/SWIFT training plan with EGLE's draft in-person training plan. There will be an in-person training in the Lansing area in late FY22 for local health department staff. This in-person session will reiterate highlights from the virtual sessions, as well as present hands-on demonstration of key points and answer attendees' questions about SDWIS. GEC will provide copies of their agendas for the training plan.	104
• Begin planning in FY22 for an additional 5 training sessions for FY23. GEC will prepare for an additional 5 training sessions about specific rules: RTCR/GWR, DBPs, SWTRs, LCR, Chems which will occur early in FY23. Attendance in one meeting to plan the training scenario is estimated (two people will attend and the PM will coordinate with SOM).	53
• Provide post training support to either SOM staff supporting LHDs or LHDs direction, as determined by EGLE. This will include any follow up training sessions, as well as support via GEC Zendesk for questions specific to training. Support will not exceed 64 hours.	64
TOTAL	309

Assumptions:
- Assumes that GEC can repurpose existing training materials. If EGLE-specific customization is required, GEC will utilize the post-training support task for additional effort requested.

Impact:
- 309Additional Hours
- $40,767.20 Additional Labor Cost in 2022
- $3,684 estimated travel costs including:
  - Three night hotel stay (two rooms for two people) at the per diem rate of $106 per night
  - Rental car ($150 per day for 4 days)
  - Per diem (meals and incidentals) of $48 for first and last travel days and $64 per diem for onsite days for two people
  - Estimated airfare at $900 round trip each for two people
  - Estimated $100 each for two people for ground transportation or parking

Change Item 5 (AKA Task 5)

Description: Assist with preparing a bi-directional data flow between SDWIS databases (NC & CWS) and the Michigan Environmental Health and Drinking Water Information System (MIEHDWIS) allowing LHD and EGLE employees to carry out work activities using current water supply inventory, contact, and compliance monitoring.

Target Due Date: Support implementation of a solution in FY23

Background: SDWIS State, hosted by GEC, currently supports the use of GEC developed APIs for MiEHDWIS to query and consume data housed in SDWIS. To meet the functionality goals of MiEHDWIS, based on defined business rules and functionality in MiEHDWIS, there is a need to have MiEHDWIS update data housed in SDWIS State. EGLE will leverage GEC domain knowledge about SDWIS State and the available APIs to support analysis and preliminary design discussions to identify a technical solution to support bi-directional data flow between SDWIS State and MiEHDWIS.

GEC Tasks:

Tasks	Effort Estimate (in hours)
• Participate in discovery and solution design discussions with KL&A (KL&A is the vendor supporting MiEHDWIS) and DTMB to determine a preliminary technical solution to support the needed bi-directional data flow. • Complete related actions items and/or analysis based on the findings of the solution design discussions with KL&A	100
TOTAL	100

Assumptions:
- Scope of data flow to include water supply inventory, contacts and compliance information.
- Assumed that this task would be completed in 2022, in anticipation of implementation in 2023, so rates for 2022 were used to calculate the labor costs.

Impact:
- 100 Additional Hours
- $15,282.83 Additional Labor Cost in 2022

Change Item 6 (AKA Task 6)

Description: Ensure Local Health Department access to GEC-hosted applications.

Target Due Date: August 2022

Background: To support secure access to SDWIS State, GEC participated in technical solution discussions with SOM to identify a solution that will allow LHDs to login using MiLogin Third Party. The discussion solution is expected to have minimal impact to the existing MiLogin integration, however, there will need to be testing support in both UAT and production validation of the SOM implemented changes to support this.

GEC Tasks:

Tasks	Effort Estimate (in hours)

• Provide support to SOM and LHDs in implementing the selected solutions to allow designated health departments access to GEC-hosted applications. ○ To support implementation of alternative options to connect LHDs to the GEC portal/SDWIS State/SWIFT and answer questions from the LHDs. The F5 switch allowing LHDs to use MiLogin via external third-party accounts is preferred versus other alternatives such as individual VPNs.	60
TOTAL	60

Assumptions:
- None

Impact:
- 60 Additional Hours in 2022
- $8,263.90 Additional Labor Cost in 2022

Change Item 7 (AKA Task 7)

Description: Employ a GEC contract employee for a finite period to continue with the NCWS program's IT Modernization effort.

Target Due Date: July 31, 2024

Background: To support the various activities related to the overall transition from WaterTrack to SDWIS and MiEHDWIS, GEC will provide consulting services of a named resource with in-depth knowledge of both WaterTrack and the SOM NCWS program and related business process. These services will overlap, but will be in addition to the hours estimated for the other change items in this change notice.

GEC Tasks:

Tasks	Effort Estimate (in hours)
• Provide consulting services in addition to other change items, to represent specific knowledge of WaterTrack and SOM NCWS program and related business processes. Weekly tasks to include: ○ Attending related meetings, conducting analysis, supporting SDWIS administration, and developing technical guidance materials for LHDs	25 hrs. per week from August 2022 through July 2024
TOTAL	4,600

Assumptions:
- Allocation of up to 25 hours per week, 100 hours per month, for 24 months

Impact:
- 2,400 Additional Hours total from August 2022 through July 2024.
- $310,689.18 Additional Labor Cost from August 2022 through July 2024 using the SME II rate.

2022			2023			2024			Total	
Hours	SME II Rate	Total	Hours	SME II Rate	Total	Hours	SME II Rate	Total	Hours	Total
500	$122.42	$61,207.75	1,200	$129.87	$155,844.72	700	$133.77	$93,636.71	2,400	$310,689.18

TASKS: GEC will perform the tasks in the Scope of Work above.

DELIVERABLES/WORK PRODUCTS:
Services under this contract include both work products and deliverables. Deliverables will require formal acceptance and will not be considered complete until the Agency Project Manager has formally accepted them.

Change Item (Task)	Deliverables/Work products
Change Item 1: Data Migration for Water Track to SDWIS State NC	Deliverables: • Migration plan • Updates to existing, or creating new Implementation, • Configuration Plan • Training Plan • Testing Plans
Change Item 2: State Lab Data into SDWIS	Deliverables: • Implementation Plan • Configuration Plan • Training Plan • Testing Plans Work Products: • Recordings from training webinars with lab staff • Documentation of processes, either by updating existing or creating new
Change Item 3: Deploy SWIFT for the NC Program; Evaluate potential for SWIMR and other GEC products	Deliverables: • Functional SWIFT production environment for the NC Program. • SWIFT NCWS Implementation Plan • SWIFT NCWS Configuration Plan • SWIFT NCWS Training Plan • SWIFT NCWS Testing Plans Work Products: • Consulting assistance, conference call, answer questions from SOM • Documentation of processes, either by updating existing or creating new • Will provide a summary document of the SWIMR and other GEC products analysis and findings.
Change Item 4: SDWIS Training	Deliverables: • SDWIS/SWIFT training _before_ October 2022 • Updated Training Plan

Change Item (Task)	Deliverables/Work products
	Work products: • Training agendas, some limited training materials may be created, but SDWIS training is generally done with a live demo of how SDWIS works • Targeted audience is LHD on SDWIS NC; GEC will provide recordings of trainings for EGLE to use later as needed.
Change Item 5: Provide evidence of the progress with KL&A to work towards bi-directional data flow between MIEHDWIS and SDWIS State.	Deliverables: • None Work Products: • Provide updates on conference calls with KL&A describing the planning of tasks to meet this objective.
Change Item 6: Health Department Access to SDWIS State and GEC applications	Deliverables: • Documentation of processes, either by updating existing or creating new: • Implementation Plan • Configuration Plan • Training Plan • Testing Plans
Change Item 7: Hiring a Temporary Contract Employee to focus on the WaterTrack to SDWIS Transition.	Deliverables: • None Work products: • Provide update, if necessary, on the hiring of an employee with WaterTrack & SDWIS State experience.

ACCEPTANCE CRITERIA:
Acceptance criteria for the deliverables include:
- Local health departments contracted through the State of Michigan will obtain access to SDWIS State NC by no later than August 1st, 2022.
- Local health department staff will receive training on SDWIS State in August and September with plans in place to deliver additional training in the first quarter of FY23. Late FY22 will include an in-person training event in Michigan.
- SWIFT will be deployed for NCWS in the fall of 2022 for SOM and health department users. Health departments/SOM staff will receive at least one training session from GEC on the application use.
- Preceding training of local health department staff in SDWIS State/SWIFT, data migration efforts from WaterTrack to SDWIS State will be completed by October 2022. This includes, but may not be limited to: water samples, compliance schedules, and monitoring schedules. Candidate violations of compliance with monitoring requirements will be determined by the SDWIS software.

- A process will be developed for the movement of data from Promium Element to SDWIS State NC in preparation for the FY2023 contract.
- Data migration from WaterTrack to SDWIS NC will be 100% complete by October 1, 2022.

PROJECT CONTROL AND REPORTS:
A bi-weekly progress report must be submitted to the Agency and DTMB Project Managers throughout the life of this project. This report may be submitted with the billing invoice. Each bi-weekly progress report must contain the following:
1. **Hours**: Indicate the number of hours expended during the past two weeks, and the cumulative total to date for the project. Also state whether the remaining hours are sufficient to complete the project.
2. **Accomplishments**: Indicate what was worked on and what was completed during the current reporting period.
3. **Funds**: Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

SPECIFIC DEPARTMENT STANDARDS:
Agency standards, if any, in addition to DTMB standards.

IMPACT

Change Item No.	LOE	Labor Cost	Other Direct Costs	Total Labor Cost and ODCs
Change Item 1	424.00	$55,939.46	$79,925.82	$135,865.29
Change Item 2	240.00	$34,303.22	$0.00	$34,303.22
Change Item 3	194.00	$26,017.24	$228,552.80	$254,570.04
Change Item 4	309.00	$40,767.20	$3,684.00	$44,451.20
Change Item 5	100.00	$15,282.83	$0.00	$15,282.83
Change Item 6	60.00	$8,263.90	$0.00	$8,263.90
Change Item 7	2,400.00	$310,689.18	$0.00	$310,689.18
Total	3,727.00	$491,263.04	$312,162.62	$803,425.67

PAYMENT SCHEDULE:
Payment will be made on a Time and Materials basis monthly for all items in the Scope of Work except the License and SaaS payments for GECSWS. The license and first annual SaaS payments will be made on the following schedule.
- SWIFT, NCWS Instance: The SWIFT license and annual SaaS costs will start to be incurred in the month in which EGLE accepts this change notice. SWIMR, NCWS Instance: The SWIMR license and annual SaaS costs will start to be incurred in the month in which EGLE decides to implement SWIMR.

DTMB will pay CONTRACTOR upon receipt of properly completed invoice(s) which shall be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices should reflect actual work completed by payment date and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices shall describe and document to the State's satisfaction a description of the work performed, the progress of the project, and fees. When expenses are invoiced,

receipts will need to be provided along with a detailed breakdown of each type of expense. Payment shall be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

PROJECT CONTACTS:
The designated Contractor Project Manager is:
  Name Kim Clemente
  Department Project Manager
  Address 3370 N Hayden Rd, Suite 123-302
  City/State/Zip Scottsdale AZ, 85251
  Phone Number 407-720-0477
  Email Address: kim.clemente@1gec.com

Kim will serve as the primary contact with regard to services who will have the authority to act on behalf of the Contractor in matters pertaining to the implementation services.

The designated Agency Program Manager is:
  Name Ronda Page
  Department EGLE
  Area DWEHD
  Building/Floor Con Hall
  Address 525 W. Allegan
  City/State/Zip Lansing, MI 48933
  Phone Number 517-242-4114
  Fax Number
  Email Address pager1@michigan.gov

  Name : Dana DeBruyn
  Department: EGLE
  Area : DWEHD
  Building/Floor Constitution Hall, 1st Floor, North Tower
  Address : 525 W. Allegan
  City/State/Zip : Lansing, MI 48933
  Phone Number: 517-930-6463
  Fax Number: N/A
  Email Address : debruynd@michigan.gov

Dana DeBruyn will serve as the primary contact with regards to EGLE items and she will have the authorization to act on behalf of Ronda Page in matters pertaining to the SOM EGLE items, while Ronda Page unavailable.

The designated DTMB Program Manager is:
  Name Laura Brancheau
  Department DTMB
  Area Agency Services Supporting EGLE, DNR, MDARD & DMVA
  Building/Floor Constitution Hall, 1st Floor, North Tower
  Address 525 W. Allegan
  City/State/Zip Lansing, MI 48933
  Phone Number 517-335-1334
  Fax Number
  Email Address brancheaul@michigan.gov

AGENCY RESPONSIBILITIES:
GEC will need assistance from SOM in setting up conference calls with appropriate staff for appropriate tasks and will need to coordinate closely with SOM staff on all tasks.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:
Contractor staff will work at the GEC offices located in Scottsdale, AZ.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:
Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of 8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing. No overtime will be permitted.

STATEMENT OF WORK – IT Change Notice

Project Title: Contract 210000000877 Change Notice #1 – PWS Data Management Support	Period of Coverage:
Requesting Department: EGLE	Date: 06/24/2022
Agency Project Manager: Ronda Page	Phone: (517) 242-4114
DTMB Project Manager: Laura Brancheau	Phone: (517) 335-1334

BACKGROUND:

EGLE-DWEHD has identified additional Public Water Supply (PWS) program data support needs that can be fulfilled by Global Environmental Consulting (GEC) through a Change Notice to the existing contract 210000000877.

PROJECT OBJECTIVE:

The objective of this change notice in relationship to the project is to provide additional consulting services closely tied to the contract services and supported applications.

- Change Item 1: Increase monthly operating support hours from 24 to 60.

SCOPE OF WORK:

Change Item 1 (Task0)

Description: Increase monthly operating support hours from 24 to 60, if needed.

Target Due Date: NA, on-going for contract duration.

Background: The original contract did not include GEC participation in a number of standing monthly activities related to EGLE business operations related to SDWIS and use of GEC Products. GEC resources have participated in a few as a courtesy to EGLE and their contributions both in regard to background knowledge and support of related analysis and action items has proven valuable to EGLE and related programs. EGLE would like to leverage that participation on an ongoing basis, increasing the available support hours for related efforts from 24 hours a month to 60 hours a month.

GEC Tasks:

Tasks	Effort Estimate (in hours)
- Attend Drinking Water and Environmental Health Division program meetings - Conduct discovery and/or analysis to related to meeting topics. - Develop related meeting or findings documentation - Investigating, making changes, testing and deploying any items that have been brought to the attention of GEC or EGLE not attributed to a bug or defect.	Net increase of 36 hours/month
TOTAL	36 hours/month

Assumptions:
- None

Impact:
- 36 Additional Hours per month, or 432 additional hours per year
- Costs per year are shown in the table below
- Note that the T&M Hourly rate card has been updated and amended, and replaces the existing rate table in the contract

GEC Staff Description	T&M Hourly Rates					Expected Additional Hours Per Year						Expected Additional Cost Per Year					
	2022	2023	2024	2025	2026	2022	2023	2024	2025	2026	Total	2022	2023	2024	2025	2026	Total
Program Manager	$146.92	$155.87	$160.54	$165.36	$170.32												
Senior Project Manager	$153.05	$162.37	$167.24	$172.26	$177.42	42.00	72.00	72.00	72.00	24.00	282.00	$6,428.00	$11,690.52	$12,041.23	$12,402.47	$4,258.18	$46,820.41
Developer 3	$122.42	$129.87	$133.77	$137.78	$141.91												
Web Designer 2	$72.82	$77.26	$79.57	$81.96	$84.42												
Subject Matter Expert 3	$131.93	$139.97	$144.17	$148.49	$152.95	210.00	360.00	360.00	360.00	120.00	1,410.00	$27,705.87	$50,388.26	$51,899.91	$53,456.91	$18,353.54	$201,804.49
Subject Matter Expert 2	$122.42	$129.87	$133.77	$137.78	$141.91												
Analyst III	$101.27	$107.44	$110.66	$113.98	$117.40												
Analyst II	$86.13	$91.37	$94.12	$96.94	$99.85												
Analyst I	$60.65	$64.34	$66.27	$68.26	$70.31												
Senior Data Specialist	$74.82	$79.38	$81.76	$84.21	$86.74												
Total						252.00	432.00	432.00	432.00	144.00	1,692.00	$34,133.87	$62,078.78	$63,941.15	$65,859.38	$22,611.72	$248,624.90

Note: 2022 includes support hours for June through December 2022, or 7 months.
2026 includes support hours for January through April 2026, or 4 months.

ACCEPTANCE CRITERIA:

Acceptance criteria for the deliverables include:

- Bi-weekly review of SDWIS Support items and hours
- EGLE tickets are resolved to the satisfaction of EGLE and GEC within the scope of the contract
- Bi-weekly report is sent detailing tickets and their status

PROJECT CONTROL AND REPORTS:

A bi-weekly progress report must be submitted to the Agency and DTMB Project Managers throughout the life of this project. This report may be submitted with the billing invoice. Each bi-weekly progress report must contain the following:
1. **Hours**: Indicate the number of hours expended during the past two weeks, and the cumulative total to date for the project. Also state whether the remaining hours are sufficient to complete the project.
2. **Accomplishments**: Indicate what was worked on and what was completed during the current reporting period.
3. **Funds**: Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

SPECIFIC DEPARTMENT STANDARDS:

Agency standards, if any, in addition to DTMB standards.

PAYMENT SCHEDULE:

Payment will be made on a Time and Materials basis monthly for all items in the Scope of Work except the License and SaaS payments for GECSWS.

DTMB will pay CONTRACTOR upon receipt of properly completed invoice(s) which shall be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices should reflect actual work completed by payment date and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices shall describe and document to the State's satisfaction a description of the work performed, the progress of the project, and fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense. Payment shall be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

The State will NOT pay for any travel expenses, including hotel, mileage, meals, parking, etc.

PROJECT CONTACTS:

The designated Contractor Project Manager is:
       Name Kim Clemente
       Department Project Manager
       Address 3370 N Hayden Rd, Suite 123-302
       City/State/Zip Scottsdale AZ, 85251
       Phone Number 407-720-0477
       Email Address: kim.clemente@1gec.com

Kim will serve as the primary contact with regard to services who will have the authority to act on behalf of the Contractor in matters pertaining to the implementation services.

The designated Agency Program Manager is:
       NameRonda Page
       DepartmentEGLE
       AreaDWEHD
       Building/FloorCon Hall
       Address525 W. Allegan
       City/State/Zip Lansing, MI 48933
       Phone Number517-242-4114
       Fax Number
       Email Addresspager1@michigan.gov

       Name ⌨ : Dana DeBruyn
       Department ⌨: EGLE
       Area ⌨ : DWEHD
       Building/Floor ⌨ Constitution Hall, 1st Floor, North Tower
       Address ⌨ : 525 W. Allegan
       City/State/Zip ⌨ : Lansing, MI 48933
       Phone Number ⌨: 517-930-6463
       Fax Number: N/A
       Email Address ⌨ : debruynd@michigan.gov

Dana DeBruyn will serve as the primary contact with regards to EGLE items and she will have the authorization to act on behalf of Ronda Page in matters pertaining to the SOM EGLE items, while Ronda Page is out of the office.

The designated DTMB Program Manager is:

> Name Laura Brancheau
> Department DTMB
> Area Agency Services Supporting EGLE, DNR, MDARD & DMVA
> Building/Floor Constitution Hall, 1st Floor, North Tower
> Address 525 W. Allegan
> City/State/Zip Lansing, MI 48933
> Phone Number 517-335-1334
> Fax Number
> Email Address brancheaul@michigan.gov

AGENCY RESPONSIBILITIES:
- GEC will need assistance from SOM in setting up conference calls with appropriate staff for appropriate tasks and will need to coordinate closely with SOM staff on all tasks.
- Review monthly report of hours and tickets
- Make decision on priority of tickets
- Make determinations on which tickets to focus on when hours availability is low

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:
Contractor staff will work at the GEC offices located in Scottsdale, AZ.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:
Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of 8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing. No overtime will be permitted.

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **1**

to

Contract Number **210000000877**

CONTRACTOR	
Global Environmental Consulting, Inc	
3370 N. Hayden Road	
Scottsdale, AZ 85251	
Laurie Potter	
603-397-7838	
laurie.potter@1gec.com	
VS0101351	

STATE		
Program Manager	Various	EGLE
Contract Administrator	Sarah Platte	DTMB
	(517) 241-7000	
	plattes3@michigan.gov	

CONTRACT SUMMARY			
SAFE DRINKING WATER INFORMATION SYSTEM (SDWIS) AND SUPPORTING SYSTEMS			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
May 1, 2021	April 30, 2026	5 - 1 Year	April 30, 2026
PAYMENT TERMS		DELIVERY TIMEFRAME	

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE				
OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		April 30, 2026
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
$1,534,892.00	$0.00	$1,534,892.00		

DESCRIPTION
Effective 9/8/2021 the State makes the attached Contract term changes detailed in the attached documentation. All other terms, conditions, specifications and pricing remain the same. Per Contractor, Agency and DTMB Central Procurement Services approval.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Laura Brancheau	517-335-1334	BrancheauL@michigan.gov
EGLE	Ronda Page	517-242-4114	PAGER1@michigan.gov

Revised Contract Terms Removing MiDEAL Language

22.17   <u>Administrative Fee and Reporting.</u> Contractor must pay an administrative fee of 1% on all payments made to Contractor under the Contract including transactions with the State (including its departments, divisions, agencies, offices, and commissions). Administrative fee payments must be made by check payable to the State of Michigan and mailed to:

> Department of Technology, Management and Budget
> Cashiering
> P.O. Box 30681
> Lansing, MI 48909

Contractor must submit an itemized purchasing activity report, which includes at a minimum, the name of the purchasing entity and the total dollar volume in sales. Reports should be mailed to

MiDeal@michigan.gov.

The administrative fee and purchasing activity report are due within 30 calendar days from the last day of each calendar quarter.

STATE OF MICHIGAN PROCUREMENT

Department of Technology, Management & Budget

525 W. Allegan Street, Lansing, MI 48909

NOTICE OF CONTRACT

NOTICE OF CONTRACT NO. **171-210000000877**

between

THE STATE OF MICHIGAN

and

<table>
<tr><td rowspan="7">CONTRACTOR</td><td>Global Environmental Consulting, Inc.</td></tr>
<tr><td>3370 N Hayden Road</td></tr>
<tr><td>Scottsdale, AZ 85251</td></tr>
<tr><td>Laurie Potter</td></tr>
<tr><td>603-397-7838</td></tr>
<tr><td>Laurie.potter@1gec.com</td></tr>
<tr><td>VS0101351</td></tr>
</table>

<table>
<tr><td rowspan="5">STATE</td><td rowspan="3">Program Manager</td><td>Various</td><td>EGLE</td></tr>
<tr><td></td><td></td></tr>
<tr><td></td><td></td></tr>
<tr><td rowspan="2">Contract Administrator</td><td>Jarrod Barron</td><td>DTMB</td></tr>
<tr><td>517-249-0406
BarronJ1@michigan.gov</td><td></td></tr>
</table>

CONTRACT SUMMARY			
DESCRIPTION: Safe Drinking Water Information System (SDWIS) and Supporting Systems			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW**
05/01/2021	04/30/2026	5 Years (Through 4/30/2031)	04/30/2026
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
Net 45		N/A	
ALTERNATE PAYMENT OPTIONS			**EXTENDED PURCHASING**
☐ P-card	☐ Payment Request (PRC)	☐ Other	☒ Yes ☐ No
MINIMUM DELIVERY REQUIREMENTS			
N/A			
MISCELLANEOUS INFORMATION			
New contract awarded from ITN 171-200000000026. Program Managers: 1. EGLE: Ronda Page, PageR1@michigan.gov, 517-242-4114. 2. DTMB: Laura Brancheau, BrancheauL@michigan.gov, 517-335-1334.			
ESTIMATED CONTRACT VALUE AT TIME OF EXECUTION			**1,534,892.00**

FOR THE CONTRACTOR:

_____

Company Name

_____

Authorized Agent Signature

_____

Authorized Agent (Print or Type)

_____

Date

FOR THE STATE:

_____

Signature

Jarrod Barron – IT Category Specialist
Name & Title

DTMB – Central Procurement Services
Agency

_____

Date

STATE OF MICHIGAN

CONTRACT TERMS

This Contract (this "**Contract**") is agreed to between the State of Michigan (the "**State**") and Global Environmental Consulting, Inc ("**Contractor**"), an Arizona Corporation. This Contract is effective on May 1, 2021 ("**Effective Date**"), and unless earlier terminated, will expire on April 30,2026 (the "**Term**").

This Contract may be renewed for any period up to April 30, 2031. Renewal must be by written notice from the State and will automatically extend the Term of this Contract.

1. **Definitions.**

    "**Accept**" has the meaning set forth in **Section 4.2(b)**.

    "**Acceptance**" has the meaning set forth in **Section 4.2(b)**.

    "**Action**" has the meaning set forth in **Section 15.1**.

    "**Allegedly Infringing Features**" has the meaning set forth in **Section 15.3(b)(ii)**.

    "**Authorized Users**" means all Persons authorized by the State to access and use the Services through the State's account under this Contract, subject to the maximum number of users specified in the applicable Statement of Work.

    "**Availability Requirement**" has the meaning set forth in **Section 5**.

    "**Business Day**" means a day other than a Saturday, Sunday or State Holiday.

    "**Change Notice**" has the meaning set forth in **Section 2.2**.

    "**Code**" has the meaning set forth in **Section 21.**

    "**Confidential Information**" has the meaning set forth in **Section 12.1**.

    "**Contract**" has the meaning set forth in the preamble.

    "**Contract Administrator**" is the individual appointed by each party to (a) administer the terms of this Contract, and (B) approve and execute any Change Notices under this Contract. Each party's Contract Administrator will be identified in the Statement of Work.

    "**Contractor**" has the meaning set forth in the preamble.

"**Contractor Personnel**" means all employees and agents of Contractor, all Subcontractors and all employees and agents of any Subcontractor, involved in the performance of Services.

"**Contractor Security Officer**" has the meaning set forth in **Section 2.5(a)**.

"**Contractor Service Manager**" has the meaning set forth in **Section 2.5(a)**.

"**Documentation**" means all generally available documentation relating to the Services, including all user manuals, operating manuals and other instructions, specifications, documents and materials, in any form or media, that describe any component, feature, requirement or other aspect of the Services, including any functionality, testing, operation or use thereof.

"**DR Plan**" has the meaning set forth in **Section 14(a)**.

"**Effective Date**" has the meaning set forth in the preamble.

"**Fees**" has the meaning set forth in **Section 9.1**.

"**Force Majeure Event**" has the meaning set forth in **Section 19**.

"**Harmful Code**" means any software, hardware or other technologies, devices or means, the purpose or effect of which is to: (a) permit unauthorized access to, or to destroy, disrupt, disable, distort, modify, or otherwise harm or impede in any manner, any (i) computer, software, firmware, data, hardware, system or network, or (ii) any application or function of any of the foregoing or the integrity, use or operation of any data Processed thereby; or (b) prevent the State or any Authorized User from accessing or using the Services or Contractor Systems as intended by this Contract, and includes any virus, bug, trojan horse, worm, backdoor or other malicious computer code and any time bomb or drop dead device.

"**HIPAA**" has the meaning set forth in **Section 10.1**.

"**Hosted Services**" has the meaning set forth in **Section 2.1(a)**.

"**Intellectual Property Rights**" means any and all rights comprising or relating to: (a) patents, patent disclosures and inventions (whether patentable or not); (b) trademarks, service marks, trade dress, trade names, logos, corporate names and domain names, together with all of the goodwill associated therewith; (c) authorship rights, copyrights and copyrightable works (including computer programs) and rights in data and databases; (d) trade secrets, know-how and other confidential information; and (e) all other intellectual property rights, in each case whether registered or unregistered and including all applications for, and renewals or extensions of, such rights, and all similar or equivalent rights or forms of protection provided by applicable Law in any jurisdiction throughout the world.

"**Key Personnel**" means any Contractor Personnel identified as key personnel in this Contract or any Statement of Work.

"**Law**" means any statute, law, ordinance, regulation, rule, code, order, constitution, treaty, common law, judgment, decree or other requirement or rule of any federal, state, local or foreign government or political subdivision thereof, or any arbitrator, court or tribunal of competent jurisdiction.

"**PAT**" means a document or product accessibility template, including any Information Technology Industry Council Voluntary Product Accessibility Template or VPAT®, that specifies how information and software products, such as websites, applications, software and associated content, conform to WCAG 2.0 Level AA.

"**Loss**" means all losses, damages, liabilities, deficiencies, claims, actions, judgments, settlements, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the costs of enforcing any right to indemnification hereunder and the cost of pursuing any insurance providers. "Losses" has a correlative meaning.

"**Person**" means an individual, corporation, partnership, joint venture, limited liability company, governmental authority, unincorporated organization, trust, association or other entity.

"**Personal Health Information (PHI)**" has the meaning set forth in **Section 10.1**.

"**Personally Identifiable Information (PII)**" has the meaning set forth in **Section 10.1**.

"**Process**" means to perform any operation or set of operations on any data, information, material, work, expression or other content, including to (a) collect, receive, input, upload, download, record, reproduce, store, organize, combine, log, catalog, cross-reference, manage, maintain, copy, adapt, alter, translate or make other improvements or derivative works, (b) process, retrieve, output, consult, use, disseminate, transmit, submit, post, transfer, disclose or otherwise provide or make available, or (c) block, erase or destroy. "**Processing**" and "**Processed**" have correlative meanings.

"**RPO**" or "**Recovery Point Objective**" means the maximum amount of potential data loss in the event of a disaster.

"**RTO**" or "**Recovery Time Objective**" means the period of time to fully restore the Hosted Services in the case of a disaster.

"**Reject**" has the meaning set forth in **Section 4.2(b)**.

"**Rejection**" has the meaning set forth in **Section 4.2(b)**.

"**Representatives**" means a party's employees, officers, directors, consultants, legal advisors and, with respect to Contractor, Contractor's Subcontractors.

"**RFP**" means the State's request for proposal designed to solicit responses for Services under this Contract.

"**SaaS Products**" means the software used as a service which is identified and described in the Statement of Work.

"**Service Level Agreement**" means the service level agreement attached as **Schedule B** to this Contract, setting forth Contractor's obligations with respect to the hosting, management and operation of the Service Software.

"**Service Software**" means any and all software applications including without limitation the SaaS Products and Web Services Products and any third-party or other software, and all new versions, updates, revisions, improvements and modifications of the foregoing, that Contractor provides remote access to and use of as part of the Services.

"**Services**" has the meaning set forth in **Section 2**

"**Source Code**" means the human readable source code of the Service Software to which it relates, in the programming language in which the Service Software was written, together with all related flow charts and technical documentation, including a description of the procedure for generating object code, all of a level sufficient to enable a programmer reasonably fluent in such programming language to understand, build, operate, support, maintain and develop modifications, upgrades, updates, adaptations, enhancements, new versions and other derivative works and improvements of, and to develop computer programs compatible with, the Service Software.

"**Specifications**" means the specifications for the Services set forth in the applicable Statement of Work and, to the extent consistent with and not limiting of the foregoing, the Documentation.

"**State**" has the meaning set forth in the preamble.

"**State Data**" has the meaning set forth in **Section 10.1**.

"**State Modification**" has the meaning set forth in **Section 15.2(a)**.

"**State Project Manager**" has the meaning set forth in **Section 2.8**.

"**State Systems**" means the information technology infrastructure, including the computers, software, databases, electronic systems (including database management systems) and networks, of the State or any of its designees.

"**Statement of Work**" has the meaning set forth in **Section 2.1(a)**. The Initial Statement of Work is attached as **Schedule A**, and subsequent Statements of Work shall be sequentially identified and attached as Schedule A-1, A-2, A-3, etc.

"**Stop Work Order**" has the meaning set forth in **Section 8**.

"**Subcontractor**" means any entity that performs any Services under this Contract and otherwise has the meaning set forth in **Section 2.4(a)**.

"**Support Services**" has the meaning set forth in **Section 6**.

"**Support Service Level Requirement**" has the meaning set forth in **Section 6**.

"**Term**" has the meaning set forth in the preamble.

"**Transition Period**" has the meaning set forth in **Section 7.3.**

"**Transition Responsibilities**" has the meaning set forth in **Section 7.3.**

"**Unauthorized Access**" means any access to the Software or Documentation not expressly set forth in this Contract, except for the exclusive purpose of (i) State's systematic collection and reporting of safe water information, (ii) State demonstrating the performance, utility and functions of the Software, and (iii) State training employees of State in the use of the Software.

"**User Data**" means any and all information reflecting the access or use of the Hosted Services by or on behalf of the State or any Authorized User, including any end user profile, visit, session, impression, click-through or click-stream data and any statistical or other analysis, information or data based on or derived from any of the foregoing.

"**WCAG 2.0 Level AA**" means level AA of the World Wide Web Consortium Web Content Accessibility Guidelines version 2.0.

"**Web Services Products**" means the web services products identified and described in the Statement of Work.

"**Work Product**" means all State-specific deliverables that Contractor is required to, or otherwise does, provide to the State under this Contract including but not limited to computer scripts, macros, user interfaces, reports, project management documents, forms, templates, and other State-specific documents and related materials together with all ideas, concepts, processes, and methodologies developed in connection with this Contract whether or not embodied in this Contract.

2. **Services.**

2.1 <u>Services</u>. Throughout the Term and at all times in connection with its actual or required performance under this Contract, Contractor will, in accordance with all terms and conditions set forth in this Contract and each applicable Statement of Work, provide to the State and its Authorized Users the following services ("**Services**"):

(a) the hosting, management and operation of the Service Software and other services for remote electronic access and use by the State and its Authorized Users ("**Hosted Services**") as described in one or more written, sequentially numbered, statements of work referencing this Contract, including all Specifications set forth in such statements of work, which, upon their execution will be attached as **Schedule A** to this Contract and by this reference are incorporated in and made a part of this Contract (each, a "**Statement of Work**");

(b) maintain the Availability Requirement set forth in the Service Level Agreement attached as **Schedule B** to this Contract;

(c)   provide maintenance and Support Services as set forth in the Service Level Agreement, attached as **Schedule B**;

(d)   implement and maintain the security requirements set forth in **Schedule C** to this Contract;

(e)   maintain a DR plan, which is attached as **Schedule D** to this Contract; and

(f)   such other services as may be specified in the applicable Statement of Work.

2.2   Change Notices.

(a)   Any modifications or changes to the Services under any executed Statement of Work will be effective only if and when memorialized in a mutually agreed written change notice ("**Change Notice**") signed by both Parties, provided, however, that for any Services provided on a limited basis (for example, on a per user, server, CPU or named-user basis), the State may, at any time, increase or decrease the number of its licenses hereunder subject to a corresponding forward-going adjustment of the Fees to reflect these changes in accordance with the pricing set forth in the applicable Statement of Work.

(b)   In the event the Services are customizable, a more detailed change control process may be specified in the applicable Statement of Work. In such event, the change control process set forth in such Statement of Work shall control.

2.3   Compliance with Laws. Contractor must comply with all applicable Laws as they concern this Contract, including by securing and maintaining all required and appropriate visas, work permits, business licenses and other documentation and clearances necessary for performance of the Services.

2.4   Subcontracting. Contractor will not itself, and will not permit any Person to, subcontract any Services, in whole or in part, without the State's prior written consent, which consent may be given or withheld in the State's sole discretion. Without limiting the foregoing:

(a)   Contractor must ensure each Contractor subcontractor (including any subcontractor of a Contractor subcontractor, each, a "**Subcontractor**") complies with all relevant terms of this Contract, including all provisions relating to State Data or other Confidential Information of the State;

(b)   the State's consent to any such Subcontractor does not relieve Contractor of its representations, warranties or obligations under this Contract;

(c)   Contractor will remain responsible and liable for any and all: (i) performance required hereunder, including the proper supervision, coordination and performance of the Services; and (ii) acts and omissions of each Subcontractor (including, such Subcontractor's employees and agents, who, to the extent they are involved in providing any Services, are deemed Contractor Personnel) to the same extent as if such acts or omissions were by Contractor;

(d)   any noncompliance by any Subcontractor or its employees or agents with the provisions of this Contract or any Statement of Work will constitute a breach by Contractor;

(e)   prior to the provision of Services by any Subcontractor, Contractor must obtain from each such proposed Subcontractor:

(i)   the identity of such Subcontractor and the location of all its data centers, if any, that will be used in Processing any State Data, which information Contractor shall promptly disclose to the State in writing; and

(ii)   a written confidentiality and restricted use agreement, giving the State rights at least equal to those set forth in **Section 10** (State Data), **Section 11** (Confidentiality), **Section 13** (Security) and **Section 14** (Disaster Recovery) and containing the Subcontractor's acknowledgment of, and agreement to, the provisions of **Section 2.5** (Contractor Personnel), a fully-executed copy of which agreement Contractor will promptly provide to the State upon the State's request.

2.5   Contractor Personnel. Contractor will:

(a)   subject to the prior written approval of the State, appoint: (i) a Contractor employee to serve as a primary contact with respect to the Services who will have the authority to act on behalf of Contractor in matters pertaining to the receipt and processing of support requests and the Support Services (the "**Contractor Service Manager**"); and (ii) a Contractor employee to respond to the State's inquiries regarding the security of the Contractor Systems who has sufficient knowledge of the security of the Contractor Systems and the authority to act on behalf of Contractor in matters pertaining thereto ("**Contractor Security Officer**"); and (iii) other Key Personnel, who will be suitably skilled, experienced and qualified to perform the Services;

(b)   provide names and contact information for Contractor's Key Personnel in the Statement of Work;

(c)   maintain the same Contractor Service Manager, Contractor Security Officer and other Key Personnel throughout the Term and such additional period, if any, as Contractor is required to perform the Services, except for changes in such personnel due to: (i) the State's request pursuant to **Section 2.5(d)**; or (ii) the death, disability, resignation or termination of such personnel or other circumstances outside Contractor's reasonable control; and

(d)   upon the reasonable written request of the State, promptly replace any Key Personnel of Contractor.

2.6   Management and Payment of Contractor Personnel.

(a)   Contractor is solely responsible for the payment of Contractor Personnel, including all fees, expenses and compensation to, by or on behalf of any Contractor Personnel and, if applicable, the withholding of income taxes and payment and withholding of social security and other payroll taxes, unemployment insurance, workers' compensation insurance payments and disability benefits.

(b)   Contractor will ensure that no Person who has been convicted of a felony or any misdemeanor involving, in any way, theft, fraud, or bribery provides any Services or has access to any State Data, State Systems or State facilities. On a case-by-case basis, the State may request that Contractor initiate a background check on any Contractor Personnel before they may have access to State Data, State Systems or State facilities. Any request for a background check shall be initiated by the State and must be reasonably related to the type of work requested. The scope of the background check is at the discretion of the State and the results shall be used solely to determine the eligibility of Contractor Personnel to work with State Data, State Systems or in State facilities. If provided to the State, results of background checks will be promptly returned to Contractor, and will be treated as Confidential Information. All investigations will include a Michigan State Police Background check (ICHAT) and may include a National Crime Information Center (NCIC) Finger Print check. Contractor will present attestation of satisfactory completion of such tests.   Contractor is responsible for all costs and expenses associated with such background checks. Pursuant to Michigan law, all agencies subject to IRS Pub. 1075 are required to ask the Michigan State Police to perform fingerprint background checks on all employees, including Contractor and Subcontractor employees, who may have access to any database of information maintained by the federal government that contains confidential or personal information, including, but not limited to, federal tax information. Further, pursuant to Michigan law, any agency described above is prohibited from providing Contractors or Subcontractors with the result of such background check. For more information, please see Michigan Public Act 427 of 2018.

2.7   Time is of the Essence. Contractor acknowledges and agrees that time is of the essence with respect to its obligations under this Contract and that prompt and timely performance of all such obligations, including all timetables and other requirements of this Contract and each Statement of Work, is strictly required.

2.8   State Project Manager. The State will appoint and, in its reasonable discretion, replace, a State employee to serve as the primary contact with respect to implementation of the Services (the "**State Project Manager**").

3.   License Grant and Restrictions. Contractor owns the entire Title of the Service Software and proprietary executable code (or any portion thereof) for the standard software commonly referred to as "GEC Safe Water Software" as made available to State by Contractor during the Term of this Contract.

3.1   Contractor License Grant. Contractor hereby grants to the State, exercisable by and through its Authorized Users, a nonexclusive, royalty-free, irrevocable (except as provided herein) non-transferable (except as may be required internally among State departments or agencies in order to account for the transfer of authority over the program utilizing the Services) right and license during the Term and such additional periods, if any, as Contractor is required to perform Services under this Contract or any Statement of Work, to:

(a)   access and use the Hosted Services, including in operation with other software, hardware, systems, networks and services, for the State's business purposes, including for Processing State Data;

(b)   generate, print, copy, upload, download, store and otherwise Process all GUI, audio, visual, digital and other output, displays and other content as may result from any access to or use of the Services;

(c)   prepare, reproduce, print, download and use a reasonable number of copies of the Specifications and Documentation for any use of the Services under this Contract; and

(d)   access and use the Services for all such non-production uses and applications as may be necessary or useful for the effective use of the Hosted Services hereunder, including for purposes of analysis, development, configuration, integration, testing, training, maintenance, support and repair, which access and use will be without charge and not included for any purpose in any calculation of the State's or its Authorized Users' use of the Services, including for purposes of assessing any Fees or other consideration payable to Contractor or determining any excess use of the Hosted Services as described in **Section 3.3**.

(e)   Contractor agrees to provide access to source code of the Service Software so that the State may modify the Service Software to their requirements in the future. Access to the source code (and documentation) is limited to circulation within the facilities of the State and shall only be accessed by Authorized Users. Prior written consent of, and notification to, the Contractor shall be required to perform such modifications.

(f)   Licensor reserves all rights in the Services Software not expressly granted to Licensee in this Agreement.

3.2   <u>License Restrictions</u>. The State will not: (a) reverse engineer, rent, lease, lend, sell, sublicense, assign, distribute, publish, transfer or otherwise make the Hosted Services available to any third party, except as expressly permitted by this Contract or in any Statement of Work; or (b) use or authorize the use of the Services or Documentation in any manner or for any purpose that is unlawful under applicable Law.

(a)   Ownership and Title. All right, title and interest to the Service Software and Documentation including ownership rights to patents, copyrights, trademarks and trade secrets therein shall be the exclusive property of Contractor.

(b)   Source Code and Modifications Ownership. Except for "Work Product" related to the Web Service Products (ownership of which will be retained by the State), Contractor retains ownership of any modifications made to the SaaS Products. In the event the State chooses to modify the Web Services Products, the State agrees not to sell, transfer, or assign any interest in the original Service Software to any third party. Any modifications made by the State to the Web Services Products nullify any warranty expressed or implied. Once modified by the State, the software maintenance for the Web Services Products becomes the responsibility of the State.

3.3   <u>Use</u>. The State will pay Contractor the corresponding Fees set forth in the Statement of Work for all Authorized Users access and use of the Service Software. Such Fees will be Contractor's sole and exclusive remedy for use of the Service Software, including any excess use.

3.4   State License Grant. The State hereby grants to Contractor a limited, non-exclusive, non-transferable license (i) to use the State's (or individual agency's, department's or division's) name, trademarks, service marks or logos, solely in accordance with the State's specifications, and (ii) to display, reproduce, distribute and transmit in digital form the State's (or individual agency's, department's or division's) name, trademarks, service marks or logos in connection with promotion of the Services as communicated to Contractor by the State. Use of the State's (or individual agency's, department's or division's) name, trademarks, service marks or logos will be specified in the applicable Statement of Work.

The State grants Contractor a revocable, non-exclusive, royalty-free license to such State modifications and derivative works to be used exclusively for the provision of Services to the State under this Contract,

4.   Service Preparation, Testing and Acceptance.

4.1   Service Preparation. Promptly upon the parties' execution of a Statement of Work, Contractor will take all steps necessary to make the Services procured thereunder ready and available for the State's use in accordance with the Statement of Work and this Contract, including any applicable milestone date or dates set forth in such Statement of Work.

4.2   Testing and Acceptance.

(a)   When Contractor notifies the State in writing that the Hosted Services are ready for use in a production environment, the State will have thirty (30) days (or such other period as may be agreed upon by the Parties in writing) from receipt of the notice to test the Hosted Services to determine whether they comply in all material respects with the requirements of this Contract and the Specifications.

(b)   Upon completion of the State's testing, the State will notify Contractor of its acceptance ("**Accept**" or "**Acceptance**") or, if it has identified any noncompliance with the Specifications, rejection ("**Reject**" or "**Rejection**") of the Hosted Services. If the State Rejects the Hosted Services, the State will provide a written list of items that must be corrected. On receipt of the State's notice, Contractor will promptly commence, at no additional cost or charge to the State, all reasonable efforts to complete, as quickly as possible and in any event within twenty (20) days (or such other period as may be agreed upon by the Parties in writing) from receipt of the State's notice, such necessary corrections, repairs and modifications to the Hosted Services to bring them into full compliance with the Specifications.

(c)   If any corrective measures are required under **Section 4.2(b)**, upon completion of all such measures, Contractor will notify the State in writing and the process set forth in **Section 4.2(a)** and **Section 4.2(b)** will be repeated; provided that if the State determines that the Hosted Services, as revised, still do not comply in all material respects with the Specifications, the State may, in its sole discretion:

(i)   require the Contractor to repeat the correction, repair and modification process set forth in **Section 4.2(b)** at no additional cost or charge to the State; or

(ii)   terminate any and all of the relevant Statement of Work, this Contract and any other Statements of Work hereunder.

(d)   The parties will repeat the foregoing procedure until the State Accepts the Hosted Services or elects to terminate the relevant Statement of Work as provided in **Section 4.2(c)(ii)** above. If the State so terminates the relevant Statement of Work, Contractor must refund to the State all sums previously paid to Contractor under such Statement of Work within ten (10) Business Days of the State's written notice of termination, and the State will be relieved of all obligations thereunder.

5.   Service Availability. Contractor will make the Hosted Services available, as measured over the course of each calendar month during the Term, in accordance with the provisions set forth in the Service Level Agreement, attached as **Schedule B** to this Contract (the "**Availability Requirement**").

6.   Support and Maintenance Services. Contractor will provide Hosted Service maintenance and support services (collectively, "**Support Services**") in accordance with the provisions set forth in the Service Level Agreement, attached as **Schedule B** to this Contract (the "**Support Service Level Requirement**").

7.   Termination, Expiration and Transition.

7.1   <u>Termination for Cause</u>. In addition to any right of termination set forth elsewhere in this Contract:

(a)   The State may terminate this Contract for cause, in whole or in part, if Contractor, as determined by the State: (i) endangers the value, integrity, or security of State Systems, State Data, or the State's facilities or personnel; (ii) becomes insolvent, petitions for bankruptcy court proceedings, or has an involuntary bankruptcy proceeding filed against it by any creditor; or (iii) breaches any of its material duties or obligations under this Contract. Any reference to specific breaches being material breaches within this Contract will not be construed to mean that other breaches are not material.

(b)   If the State terminates this Contract under this **Section 7.1**, the State will issue a termination notice specifying whether Contractor must: (a) cease performance immediately, or (b) continue to perform for a specified period. If it is later determined that Contractor was not in breach of this Contract, the termination will be deemed to have been a termination for convenience, effective as of the same date, and the rights and obligations of the parties will be limited to those provided in **Section 7.2**.

(c)   The State will only pay for amounts due to Contractor for Services accepted by the State on or before the date of termination, subject to the State's right to set off any amounts owed by the Contractor for the State's reasonable costs in terminating this Contract. Contractor must promptly reimburse to the State any Fees prepaid by the State prorated to the date of such termination. Further, Contractor must pay all reasonable costs incurred by the State in terminating this Contract for cause, including administrative costs, attorneys' fees, court costs, transition costs, and any costs the State incurs to procure the Services from other sources.

7.2   Termination for Convenience. The State may immediately terminate this Contract in whole or in part, without penalty and for any reason, including but not limited to, appropriation or budget shortfalls. The termination notice will specify whether Contractor must: (a) cease performance immediately, or (b) continue to perform in accordance with **Section 7.3**. If the State terminates this Contract for convenience, the State will pay all reasonable costs, as determined by the State, for State approved Transition Responsibilities to the extent the funds are available.

7.3   Transition Responsibilities. Upon termination or expiration of this Contract for any reason, Contractor must, for a period of time specified by the State (not to exceed 90 calendar days; the "**Transition Period**"), provide all reasonable transition assistance requested by the State, to allow for the expired or terminated portion of the Contract to continue without interruption or adverse effect, and to facilitate the orderly transfer of the Services to the State or its designees. Such transition assistance may include but is not limited to: (a) continuing to perform the Services at the established Statement of Work rates; (b) taking all reasonable and necessary measures to transition performance of the work, including all applicable Services to the State or the State's designee; (c) taking all necessary and appropriate steps, or such other action as the State may direct, to preserve, maintain, protect, or return to the State all State Data; and (d) preparing an accurate accounting from which the State and Contractor may reconcile all outstanding accounts (collectively, the "**Transition Responsibilities**"). The Term of this Contract is automatically extended through the end of the Transition Period.

7.4   Effect of Termination. Upon and after the termination or expiration of this Contract or one or more Statements of Work for any or no reason:

(a)   Contractor will be obligated to perform all Transition Responsibilities specified in **Section 7.3**.

(b)   All licenses granted to Contractor in State Data will immediately and automatically also terminate. Contractor must promptly return to the State all State Data not required by Contractor for its Transition Responsibilities, if any.

(c)   Contractor will (i) return to the State all documents and tangible materials (and any copies) containing, reflecting, incorporating, or based on the State's Confidential Information; (ii) permanently erase the State's Confidential Information from its computer systems; and (iii) certify in writing to the State that it has complied with the requirements of this **Section 7.4(c)**, in each case to the extent such materials are not required by Contractor for Transition Responsibilities, if any.

(d)   Notwithstanding any provisions of this Contract or any Statement of Work to the contrary, upon the State's termination of this Contract or any Statement of Work for cause pursuant to **Section 7.1**, the State will have the right and option to continue to access and use the Services under each applicable Statement of Work, in whole and in part, for a period not to exceed one hundred and eighty (180) days from the effective date of such termination pursuant to the terms and conditions of this Contract and each applicable Statement of Work and at a reduced rate of fifty (50%) off the applicable Fees set forth in each such Statement of Work.

7.5   Survival. The rights, obligations and conditions set forth in this **Section 7.5** and **Section 1** (Definitions), **Section 3.1** (Contractor License Grant);**Section 7.3** (Effect of Termination; Data Retention), **Section 10** (State Data), **Section 12** (Confidentiality), **Section 13** (Security), **Section 15.1** (Indemnification), **Section 16** (Limitations of Liability), **Section 17** (Representations and Warranties), **Section 18** (Insurance) and **Section 21** (Effect of Contractor Bankruptcy) and **Section 22** (General Provisions), and any right, obligation or condition that, by its express terms or nature and context is intended to survive the termination or expiration of this Contract, survives any such termination or expiration hereof.

8. **Stop Work Order**. The State may, at any time, order the Services of Contractor fully or partially stopped for its own convenience for up to ninety (90) calendar days at no additional cost to the State. The State will provide Contractor a written notice detailing such suspension (a "**Stop Work Order**"). Contractor must comply with the Stop Work Order upon receipt. Within 90 days, or any longer period agreed to by Contractor, the State will either: (a) issue a notice authorizing Contractor to resume work, or (b) terminate this Contract. The State will not pay for any Services, Contractor's lost profits, or any additional compensation during a stop work period.

9. **Fees and Expenses**.

9.1   Fees. Subject to the terms and conditions of this Contract, the applicable Statement of Work, and the Service Level Agreement, the State shall pay the fees set forth in the applicable Statement of Work, subject to such increases and adjustments as may be permitted pursuant to **Section 9.2** ("**Fees**").

9.2   Fees during Option Years. Contractor's Fees are fixed during the initial period of the Term. Contractor may increase Fees for any renewal period by providing written notice to the State at least sixty (60) calendar days prior to the commencement of such renewal period. An increase of Fees for any renewal period may not exceed three percent (3%) of the Fees effective during the immediately preceding twelve (12) month period. No increase in Fees is effective unless made in compliance with the provisions of this **Section 9.2**.

9.3   Responsibility for Costs. Contractor is responsible for all costs and expenses incurred in or incidental to the performance of Services, including all costs of any materials supplied by Contractor, all fees, fines, licenses, bonds, or taxes required of or imposed against Contractor, and all other of Contractor's costs of doing business.

9.4   Taxes. The State is exempt from State sales tax for direct purchases and may be exempt from federal excise tax, if Services purchased under this Contract are for the State's exclusive use. All Fees are exclusive of taxes, and Contractor is responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state, or local governmental entity on any amounts payable by the State under this Contract.

9.5   Invoices. Contractor will invoice the State for Fees in accordance with the requirements set forth in the Statement of Work, including any requirements that condition the rendering of invoices and the payment of Fees upon the successful completion of Milestones. Contractor must submit each invoice

in both hard copy and electronic format, via such delivery means and to such address as are specified by the State in the Statement of Work. Each separate invoice must:

(a)   clearly identify the Contract and purchase order number to which it relates, in such manner as is required by the State;

(b)   list each Fee item separately;

(c)   include sufficient detail for each line item to enable the State to satisfy its accounting and charge-back requirements;

(d)   for Fees determined on a time and materials basis, report details regarding the number of hours performed during the billing period, the skill or labor category for such Contractor Personnel and the applicable hourly billing rates;

(e)   include such other information as may be required by the State as set forth in the Statement of Work; and

(f)   Itemized invoices must be submitted to DTMB-Accounts-Payable@michigan.gov.

9.6   Payment Terms. Invoices are due and payable by the State, in accordance with the State's standard payment procedures as specified in 1984 Public Act no. 279, MCL 17.51, et seq., within forty-five (45) calendar days after receipt, provided the State determines that the invoice was properly rendered. The State will only disburse payments under this Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at http://www.michigan.gov/SIGMAVSS to receive electronic fund transfer payments. If Contractor does not register, the State is not liable for failure to provide payment.

9.7   State Audits of Contractor.

(a)   During the Term, and for four (4) years after, Contractor must maintain complete and accurate books and records regarding its business operations relevant to the calculation of Fees and any other information relevant to Contractor's compliance with this **Section 9**. During the Term, and for four (4) years after, upon the State's request, Contractor must make such books and records and appropriate personnel, including all financial information, available during normal business hours for inspection and audit by the State or its authorized representative, provided that the State: (a) provides Contractor with at least fifteen (15) days prior notice of any audit, and (b) conducts or causes to be conducted such audit in a manner designed to minimize disruption of Contractor's normal business operations.

(b)   The State may take copies and abstracts of materials audited. The State will pay the cost of such audits unless an audit reveals an overbilling or over-reporting of five percent (5%) or more, in which case Contractor shall reimburse the State for the reasonable cost of the audit. Contractor must immediately upon written notice from the State pay the State the amount of any overpayment revealed by the audit, together with any reimbursement payable pursuant to the preceding sentence.

9.8   Payment Does Not Imply Acceptance. The making of any payment or payments by the State, or the receipt thereof by Contractor, will in no way affect the responsibility of Contractor to perform the Services in accordance with this Contract, and will not imply the State's Acceptance of any Services or the waiver of any warranties or requirements of this Contract, including any right to Service Credits.

9.9   Payment Disputes. The State may withhold from payment any and all payments and amounts the State disputes in good faith, pending resolution of such dispute, provided that the State:

(a)   timely renders all payments and amounts that are not in dispute;

(b)   notifies Contractor of the dispute prior to the due date for payment, specifying in such notice:

(i)   the amount in dispute; and

(ii)   the reason for the dispute set out in sufficient detail to facilitate investigation by Contractor and resolution by the parties;

(c)   works with Contractor in good faith to resolve the dispute promptly; and

(d)   promptly pays any amount determined to be payable by resolution of the dispute.

Contractor shall not withhold or delay any Hosted Services or Support Services or fail to perform any other Services or obligations hereunder by reason of the State's good faith withholding of any payment or amount in accordance with this **Section 9.9** or any dispute arising therefrom

9.10 Availability and Support Service Level Credits. Contractor acknowledges and agrees that any credits assessed under the Service Level Agreement: (a) is a reasonable estimate of and compensation for the anticipated or actual harm to the State that may arise from not meeting the Availability Requirement or the Support Service Level Requirement, which would be impossible or very difficult to accurately estimate; and (b) may, at the State's option, be credited or set off against any Fees or other charges payable to Contractor under this Contract or be payable to the State upon demand. Credits may not exceed the total amount of Fees that would be payable for the relevant service period in which the credits are assessed.

9.11 Right of Set-off. Without prejudice to any other right or remedy it may have, the State reserves the right to set off at any time any amount then due and owing to it by Contractor against any amount payable by the State to Contractor under this Contract.

10. State Data.

10.1 Ownership. The State's data ("**State Data**," which will be treated by Contractor as Confidential Information) includes: (a) User Data; and (b) the State's data collected, used, processed, stored, or generated in connection with the Services, including but not limited to (i) personally identifiable information ("**PII**") collected, used, processed, stored, or generated as the result of the Services,

including, without limitation, any information that identifies an individual, such as an individual's social security number or other government-issued identification number, date of birth, address, telephone number, biometric data, mother's maiden name, email address, credit card information, or an individual's name in combination with any other of the elements here listed; and (ii) personal health information ("**PHI**") collected, used, processed, stored, or generated as the result of the Services, which is defined under the Health Insurance Portability and Accountability Act ("**HIPAA**") and its related rules and regulations. State Data is and will remain the sole and exclusive property of the State and all right, title, and interest in the same is reserved by the State. This **Section 10.1** survives termination or expiration of this Contract.

10.2 <u>Contractor Use of State Data</u>. Contractor is provided a limited license to State Data for the sole and exclusive purpose of providing the Services, including a license to collect, process, store, generate, and display State Data only to the extent necessary in the provision of the Services. Contractor must: (a) keep and maintain State Data in strict confidence, using such degree of care as is appropriate and consistent with its obligations as further described in this Contract and applicable law to avoid unauthorized access, use, disclosure, or loss; (b) use and disclose State Data solely and exclusively for the purpose of providing the Services, such use and disclosure being in accordance with this Contract, any applicable Statement of Work, and applicable law; and (c) not use, sell, rent, transfer, distribute, or otherwise disclose or make available State Data for Contractor's own purposes or for the benefit of anyone other than the State without the State's prior written consent. This **Section 10.2** survives termination or expiration of this Contract.

10.3 <u>Backup and Extraction of State Data</u>. Contractor will conduct, or cause to be conducted periodic back-ups of State Data at a frequency that will ensure the RPO requirements set forth in **Section 14(a)** of this Contract. All backed up State Data shall be located in the continental United States. Contractor must, within five (5) Business Days of the State's request, provide the State, without charge and without any conditions or contingencies whatsoever (including but not limited to the payment of any fees due to Contractor), an extract of State Data in the format specified by the State.

10.4 <u>Discovery</u>. Contractor shall immediately notify the State upon receipt of any requests which in any way might reasonably require access to State Data or the State's use of the Hosted Services. Contractor shall notify the State Project Manager by the fastest means available and also in writing. In no event shall Contractor provide such notification more than twenty-four (24) hours after Contractor receives the request. Contractor shall not respond to subpoenas, service of process, FOIA requests, and other legal requests related to the State without first notifying the State and obtaining the State's prior approval of Contractor's proposed responses. Contractor agrees to provide its completed responses to the State with adequate time for State review, revision and approval.

10.5 <u>Loss or Compromise of Data</u>. In the event of any act, error or omission, negligence, misconduct, or breach on the part of Contractor that compromises or is suspected to compromise the security, confidentiality, or integrity of State Data or the physical, technical, administrative, or organizational safeguards put in place by Contractor that relate to the protection of the security, confidentiality, or integrity of State Data, Contractor must, as applicable: (a) notify the State as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence; (b) cooperate

with the State in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise required by the State; (c) in the case of PII or PHI, at the State's sole election, (i) with approval and assistance from the State, notify the affected individuals who comprise the PII or PHI as soon as practicable but no later than is required to comply with applicable law, or, in the absence of any legally required notification period, within five (5) calendar days of the occurrence; or (ii) reimburse the State for any costs in notifying the affected individuals; (d) in the case of PII, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the PII for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twenty-four (24) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) pay for any costs associated with the occurrence, including but not limited to any costs incurred by the State in investigating and resolving the occurrence, including reasonable attorney's fees associated with such investigation and resolution; (g) without limiting Contractor's obligations of indemnification as further described in this Contract, indemnify, defend, and hold harmless the State for any and all claims, including reasonable attorneys' fees, costs, and incidental expenses, which may be suffered by, accrued against, charged to, or recoverable from the State in connection with the occurrence; (h) be responsible for recreating lost State Data in the manner and on the schedule set by the State without charge to the State; and (i) provide to the State a detailed plan within ten (10) calendar days of the occurrence describing the measures Contractor will undertake to prevent a future occurrence. Notification to affected individuals, as described above, must comply with applicable law, be written in plain language, not be tangentially used for any solicitation purposes, and contain, at a minimum: name and contact information of Contractor's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Contractor has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Contractor. The State will have the option to review and approve any notification sent to affected individuals prior to its delivery. Notification to any other party, including but not limited to public media outlets, must be reviewed and approved by the State in writing prior to its dissemination. The parties agree that any damages relating to a breach of this **Section 9.5** are to be considered direct damages and not consequential damages. This section survives termination or expiration of this Contract.

10.6 State's Governance, Risk and Compliance (GRC) platform. Contractor is required to assist the State with its security accreditation process through the development, completion and ongoing updating of a system security plan using the State's automated GRC platform, and implement any required safeguards or remediate any security vulnerabilities as identified by the results of the security accreditation process.

10.7 HIPAA Compliance. The State and Contractor must comply with all obligations under HIPAA and its accompanying regulations, including but not limited to entering into a business associate agreement, if reasonably necessary to keep the State and Contractor in compliance with HIPAA.

11. Accessibility Requirements.

11.1 All Software provided by Contractor under this Contract, including associated content and documentation, must conform to WCAG 2.0 Level AA. Contractor must provide a description of conformance with WCAG 2.0 Level AA specifications by providing a completed PAT for each product provided under the Contract. At a minimum, Contractor must comply with the WCAG 2.0 Level AA conformance claims it made to the State, including the level of conformance provided in any PAT. Throughout the Term of the Contract, Contractor must:

(a)   maintain compliance with WCAG 2.0 Level AA and meet or exceed the level of conformance provided in its written materials, including the level of conformance provided in each PAT;

(b)   comply with plans and timelines approved by the State to achieve conformance in the event of any deficiencies;

(c)   ensure that no Maintenance Release, New Version, update or patch, when properly installed in accordance with this Contract, will have any adverse effect on the conformance of Contractor's Software to WCAG 2.0 Level AA;

(d)   promptly respond to and resolve any complaint the State receives regarding accessibility of Contractor's Software;

(e)   upon the State's written request, provide evidence of compliance with this Section by delivering to the State Contractor's most current PAT for each product provided under the Contract; and

(f)   participate in the State of Michigan Digital Standards Review described below.

11.2 <u>State of Michigan Digital Standards Review.</u> Contractor must assist the State, at no additional cost, with development, completion, and on-going maintenance of an accessibility plan, which requires Contractor, upon request from the State, to submit evidence to the State to validate Contractor's accessibility and compliance with WCAG 2.0 Level AA. Prior to the solution going-live and thereafter on an annual basis, or as otherwise required by the State, re-assessment of accessibility may be required. At no additional cost, Contractor must remediate all issues identified from any assessment of accessibility pursuant to plans and timelines that are approved in writing by the State.

11.3 <u>Warranty.</u> Contractor warrants that all WCAG 2.0 Level AA conformance claims made by Contractor pursuant to this Contract, including all information provided in any PAT Contractor provides to the State, are true and correct. If the State determines such conformance claims provided by the Contractor represent a higher level of conformance than what is actually provided to the State, Contractor will, at its sole cost and expense, promptly remediate its Software to align with Contractor's stated WCAG 2.0 Level AA conformance claims in accordance with plans and timelines that are approved in writing by the State. If Contractor is unable to resolve such issues in a manner acceptable to the State, in addition to all other remedies available to the State, the State may terminate this Contract for cause under **Section 7**.

11.4 Contractor must, without limiting Contractor's obligations of indemnification as further described in this Contract, indemnify, defend, and hold harmless the State for any and all claims, including

reasonable attorneys' fees, costs, and incidental expenses, which may be suffered by, accrued against, charged to, or recoverable from the State arising out of its failure to comply with the foregoing accessibility standards

11.5 Failure to comply with the requirements in this **Section** shall constitute a material breach of this Contract.

12. Confidentiality.

12.1 <u>Meaning of Confidential Information</u>. The term "**Confidential Information**" means all information and documentation of a party that: (a) has been marked "confidential" or with words of similar meaning, at the time of disclosure by such party; (b) if disclosed orally or not marked "confidential" or with words of similar meaning, was subsequently summarized in writing by the disclosing party and marked "confidential" or with words of similar meaning; and, (c) should reasonably be recognized as confidential information of the disclosing party. The term "Confidential Information" does not include any information or documentation that was or is: (a) in the possession of the State and subject to disclosure under the Michigan Freedom of Information Act (FOIA); (b) already in the possession of the receiving party without an obligation of confidentiality; (c) developed independently by the receiving party, as demonstrated by the receiving party, without violating the disclosing party's proprietary rights; (d) obtained from a source other than the disclosing party without an obligation of confidentiality; or, (e) publicly available when received, or thereafter became publicly available (other than through any unauthorized disclosure by, through, or on behalf of, the receiving party). Notwithstanding the above, in all cases and for all matters, State Data is deemed to be Confidential Information. Notwithstanding the above, in all cases and for all matters, the GECSWS Software and the Documentation may contain information that may be proprietary and/or constitute trade secrets of the Contractor and is considered non-public data. Other than as may be required by applicable law, regulation, or by order from a court of competent jurisdiction, the State hereby agrees not to disclose such information except to persons and organizations expressly authorized by the Contractor to receive such information. The State shall not remove or alter any copyright notices or proprietary legends affixed by the Contractor to the Software.

12.2 <u>Obligation of Confidentiality</u>. The parties agree to hold all Confidential Information in strict confidence and not to copy, reproduce, sell, transfer, or otherwise dispose of, give or disclose such Confidential Information to third parties other than employees, agents, or subcontractors of a party who have a need to know in connection with this Contract or to use such Confidential Information for any purposes whatsoever other than the performance of this Contract. The parties agree to advise and require their respective employees, agents, and subcontractors of their obligations to keep all Confidential Information confidential. Disclosure to the Contractor's subcontractor is permissible where: (a) the subcontractor is a Permitted Subcontractor; (b) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the Permitted Subcontractor's responsibilities; and (c) Contractor obligates the Permitted Subcontractor in a written contract to maintain the State's Confidential Information in confidence. At the State's request, any of the Contractor's Representatives may be required to execute a separate agreement to be bound by the provisions of this **Section 12.2.**

12.3   Cooperation to Prevent Disclosure of Confidential Information. Each party must use its best efforts to assist the other party in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the foregoing, each party must advise the other party immediately in the event either party learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Contract. Each party will cooperate with the other party in seeking injunctive or other equitable relief against any such person.

12.4   Remedies for Breach of Obligation of Confidentiality. Each party acknowledges that breach of its obligation of confidentiality may give rise to irreparable injury to the other party, which damage may be inadequately compensable in the form of monetary damages. Accordingly, a party may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies which may be available, to include, in the case of the State, at the sole election of the State, the immediate termination, without liability to the State, of this Contract or any Statement of Work corresponding to the breach or threatened breach.

12.5   Surrender of Confidential Information upon Termination. Upon termination or expiration of this Contract or a Statement of Work, in whole or in part, each party must, within five (5) Business Days from the date of termination, return to the other party any and all Confidential Information received from the other party, or created or received by a party on behalf of the other party, which are in such party's possession, custody, or control. If Contractor or the State determine that the return of any Confidential Information is not feasible, such party must destroy the Confidential Information and certify the same in writing within five (5) Business Days from the date of termination to the other party.

13. Security. Throughout the Term and at all times in connection with its actual or required performance of the Services, Contractor will maintain and enforce an information security program including safety and physical and technical security policies and procedures with respect to its Processing of the State's Confidential Information that comply with the requirements of the State's data security policies as set forth in **Schedule C**.

14. Disaster Recovery and Backup. Throughout the Term and at all times in connection with its actual or required performance of the Services, Contractor will:

(a)   maintain and operate a backup and disaster recovery plan to achieve a Recovery Point Objective (RPO) of 4 hours, and a Recovery Time Objective (RTO) of 24 hours (the "**DR Plan**"), and implement such DR Plan in the event of any unplanned interruption of the Hosted Services. Contractor's current DR Plan, revision history, and any reports or summaries relating to past testing of or pursuant to the DR Plan are attached as **Schedule D**. Contractor will actively test, review and update the DR Plan on at least an annual basis using industry best practices as guidance. Contractor will provide the State with copies of all such updates to the Plan within fifteen (15) days of its adoption by Contractor. All updates to the DR Plan are subject to the requirements of this **Section 14**; and

(b)   provide the State with copies of all reports resulting from any testing of or pursuant to the DR Plan promptly after Contractor's receipt or preparation. If Contractor fails to reinstate all material Hosted Services within the periods of time set forth in the DR Plan, the State may, in addition to any other

remedies available under this Contract, in its sole discretion, immediately terminate this Contract as a non-curable default under **Section 7.1(a)**.

15. Indemnification.

    15.1   <u>General Indemnification</u>. Contractor must defend, indemnify and hold harmless the State, and the State's agencies, departments, officers, directors, employees, agents, and contractors from and against all Losses arising out of or resulting from any third party claim, suit, action or proceeding (each, an "**Action**") that does or is alleged to arise out of or result from:

        (a)   the Contractor's breach of any representation, warranty, covenant or obligation of Contractor under this Contract (including, in the case of Contractor, any action or failure to act by any Contractor Personnel that, if taken or not taken by Contractor, would constitute such a breach by Contractor); or

        (b)   any negligence or more culpable act or omission (including recklessness or willful misconduct) in connection with the performance or nonperformance of any Services or other activity actually or required to be performed by or on behalf of, Contractor (including, in the case of Contractor, any Contractor Personnel) under this Contract, provided that, to the extent that any Action or Losses described in this **Section 15.1** arises out of, results from, or alleges a claim that any of the Services does or threatens to infringe, misappropriate or otherwise violate any Intellectual Property Rights or other rights of any third party, Contractor's obligations with respect to such Action and Losses, if any, shall be subject to the terms and conditions of **Section 15.2(a)** through **Section 15.3(b)** and **Section 15.3**.

    15.2   <u>Infringement Indemnification By Contractor</u>. Contractor must indemnify, defend and hold the State, and the State's agencies, departments, officers, directors, employees, agents, and contractors harmless from and against all Losses arising out of or resulting from any Action that does or is alleged to arise out of or result from a claim that any of the Services, or the State's or any Authorized User's use thereof, actually does or threatens to infringe, misappropriate or otherwise violate any Intellectual Property Right or other right of a third party, provided however, that Contractor shall have no liability or obligation for any Action or Loss to the extent that such Action or Loss arises out of or results from any:

        (a)   alteration or modification of the Hosted Services or Service Software by or on behalf of the State or any Authorized User without Contractor's authorization (each, a "**State Modification**"), provided that no infringement, misappropriation or other violation of third party rights would have occurred without such State Modification and provided further that any alteration or modification made by or for Contractor at the State's request shall not be excluded from Contractor's indemnification obligations hereunder unless (i) such alteration or modification has been made pursuant to the State's written specifications and (ii) the Hosted Services, as altered or modified in accordance with the State's specifications, would not have violated such third party rights but for the manner in which the alteration or modification was implemented by or for Contractor; and

        (b)   use of the Hosted Services by the State or an Authorized User pursuant to this Contract in combination with any software or service not provided, authorized or approved by or on behalf of

Contractor, if (i) no violation of third party rights would have occurred without such combination and (ii) such software or service is not commercially available and not standard in Contractor's or the State's industry and there are no Specifications, Documentation, or other materials indicating Contractor's specification, authorization or approval of the use of the Hosted Services in combination therewith.

15.3 <u>Mitigation</u>.

(a)   If Contractor receives or otherwise learns of any threat, warning or notice alleging that all, or any component or feature, of the Services violates a third party's rights, Contractor must promptly notify the State of such fact in writing, and take all commercially reasonable actions necessary to ensure the State's continued right to access and use such Services and otherwise protect the State from any Losses in connection therewith, including investigating such allegation and obtaining a credible opinion of counsel that it is without merit.

(b)   Subject to the exclusions set forth in clauses (a) and (b) of **Section 15.2**, if any of the Services or any component or feature thereof is ruled to infringe or otherwise violate the rights of any third party by any court of competent jurisdiction, or if any use of any Services or any component thereof is threatened to be enjoined, or is likely to be enjoined or otherwise the subject of an infringement or misappropriation claim, Contractor must, at Contractor's sole cost and expense:

(i)   procure for the State the right to continue to access and use the Services to the full extent contemplated by this Contract and the Specifications; or

(ii)   modify or replace all components, features and operations of the Services that infringe or are alleged to infringe ("**Allegedly Infringing Features**") to make the Services non-infringing while providing equally or more suitable features and functionality, which modified and replacement services shall constitute Services and be subject to the terms and conditions of this Contract.

(c)   If neither of the remedies set forth in **Section 15.3(b)** is reasonably available with respect to the Allegedly Infringing Features then Contractor may direct the State to cease any use of any materials that have been enjoined or finally adjudicated as infringing, provided that Contractor will:

(i)   refund to the State any prepaid Fees for Services that have not been provided; and

(ii)   in any case, at its sole cost and expense, secure the right for the State to continue using the Allegedly Infringing Features for a transition period of up to six (6) months to allow the State to replace the affected Services or Allegedly Infringing Features without disruption.

(d)   The remedies set forth in this **Section 15.3** are in addition to, and not in lieu of, all other remedies that may be available to the State under this Contract or otherwise, including the State's right to be indemnified pursuant to **Section 15.1** and **Section 15.2**.

15.4 <u>Indemnification Procedure</u>. The State will notify Contractor in writing if indemnification is sought; however, failure to do so will not relieve Contractor, except to the extent that Contractor is materially prejudiced. Contractor must, to the satisfaction of the State, demonstrate its financial ability to carry out these obligations. The State is entitled to: (i) regular updates on proceeding status; (ii) participate in the defense of the proceeding; (iii) employ its own counsel; and to (iv) retain control of the defense, at its own expense, if the State deems necessary. Contractor will not, without the State's prior written consent (not to be unreasonably withheld), settle, compromise, or consent to the entry of any judgment in or otherwise seek to terminate any claim, action, or proceeding. Any litigation activity on behalf of the State or any of its subdivisions, under this **Section 15**, must be coordinated with the Department of Attorney General. An attorney designated to represent the State may not do so until approved by the Michigan Attorney General and appointed as a Special Assistant Attorney General.

16. Limitations of Liability.

(a) <u>The State's Disclaimer of Damages</u>. THE STATE WILL NOT BE LIABLE, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR BY STATUTE OR OTHERWISE, FOR ANY CLAIM RELATED TO OR ARISING UNDER THIS CONTRACT FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS AND LOST BUSINESS OPPORTUNITIES.

(b) <u>The State's Limitation of Liability</u>. IN NO EVENT WILL THE STATE'S AGGREGATE LIABILITY TO CONTRACTOR UNDER THIS CONTRACT, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR BY STATUTE OR OTHERWISE, FOR ANY CLAIM RELATED TO OR ARISING UNDER THIS CONTRACT, EXCEED THE MAXIMUM AMOUNT OF FEES SPECIFIED IN THE STATEMENT OF WORK.

17. Contractor Representations and Warranties.

17.1 <u>Authority and Bid Response</u>. Contractor represents and warrants to the State that:

(a) it is duly organized, validly existing, and in good standing as a corporation or other entity as represented under this Contract under the laws and regulations of its jurisdiction of incorporation, organization, or chartering;

(b) it has the full right, power, and authority to enter into this Contract, to grant the rights and licenses granted under this Contract, and to perform its contractual obligations;

(c) the execution of this Contract by its Representative has been duly authorized by all necessary organizational action;

(d) when executed and delivered by Contractor, this Contract will constitute the legal, valid, and binding obligation of Contractor, enforceable against Contractor in accordance with its terms;

(e) the prices proposed by Contractor were arrived at independently, without consultation, communication, or agreement with any other Bidder for the purpose of restricting competition; the prices

quoted were not knowingly disclosed by Contractor to any other Bidder to the RFP; and no attempt was made by Contractor to induce any other Person to submit or not submit a proposal for the purpose of restricting competition;

(f)   all written information furnished to the State by or for Contractor in connection with this Contract, including Contractor's bid response to the RFP, is true, accurate, and complete, and contains no untrue statement of material fact or omits any material fact necessary to make the information not misleading; and

(g)   Contractor is not in material default or breach of any other contract or agreement that it may have with the State or any of its departments, commissions, boards, or agencies. Contractor further represents and warrants that it has not been a party to any contract with the State or any of its departments that was terminated by the State within the previous five (5) years for the reason that Contractor failed to perform or otherwise breached an obligation of the contract.

(h)   Contractor is neither currently engaged in nor will engage in the boycott of a person based in or doing business with a strategic partner as described in 22 USC 8601 to 8606.

17.2 <u>Software and Service Warranties</u>. Contractor represents and warrants to the State that:

(a)   Contractor has, and throughout the Term and any additional periods during which Contractor does or is required to perform the Services will have, the unconditional and irrevocable right, power and authority, including all permits and licenses required, to provide the Services and grant and perform all rights and licenses granted or required to be granted by it under this Contract;

(b)   neither Contractor's grant of the rights or licenses hereunder nor its performance of any Services or other obligations under this Contract does or at any time will: (i) conflict with or violate any applicable Law, including any Law relating to data privacy, data security or personal information; (ii) require the consent, approval or authorization of any governmental or regulatory authority or other third party; or (iii) require the provision of any payment or other consideration by the State or any Authorized User to any third party, and Contractor shall promptly notify the State in writing if it becomes aware of any change in any applicable Law that would preclude Contractor's performance of its material obligations hereunder;

(c)   as accessed and used by the State or any Authorized User in accordance with this Contract and the Specifications, the Hosted Services, Documentation and all other Services and materials provided by Contractor under this Contract will not infringe, misappropriate or otherwise violate any Intellectual Property Right or other right of any third party;

(d)   there is no settled, pending or, to Contractor's knowledge as of the Effective Date, threatened Action, and it has not received any written, oral or other notice of any Action (including in the form of any offer to obtain a license): (i) alleging that any access to or use of the Services or Service Software does or would infringe, misappropriate or otherwise violate any Intellectual Property Right of any third party; (ii) challenging Contractor's ownership of, or right to use or license, any software or other materials used or required to be used in connection with the performance or receipt of the Services, or

alleging any adverse right, title or interest with respect thereto; or (iii) that, if decided unfavorably to Contractor, would reasonably be expected to have an actual or potential adverse effect on its ability to perform the Services or its other obligations under this Contract, and it has no knowledge after reasonable investigation of any factual, legal or other reasonable basis for any such litigation, claim or proceeding;

(e)   the Service Software and Services will in all material respects conform to and perform in accordance with the Specifications and all requirements of this Contract, including the Availability and Availability Requirement provisions set forth in **Section 5**;

(f)   all Specifications are, and will be continually updated and maintained so that they continue to be, current, complete and accurate and so that they do and will continue to fully describe the Hosted Services in all material respects such that at no time during the Term or any additional periods during which Contractor does or is required to perform the Services will the Hosted Services have any material undocumented feature;

(g)   the Contractor Systems and Services are and will remain free of Harmful Code;

(h)   Contractor will not advertise through the Hosted Services (whether with adware, banners, buttons or other forms of online advertising) or link to external web sites that are not approved in writing by the State;

(i)   Contractor will perform all Services in a timely, professional and workmanlike manner with a level of care, skill, practice and judgment consistent with generally recognized industry standards and practices for similar services, using personnel with the requisite skill, experience and qualifications, and will devote adequate resources to meet Contractor's obligations (including the Availability Requirement and Support Service Level Requirements) under this Contract;

(j)   During the term of this Contract, any audit rights contained in any third-party software license agreement or end user license agreement for third-party software incorporated in or otherwise used in conjunction with the Services, will apply solely to Contractor's (or its subcontractors) facilities and systems that host the Services (including any disaster recovery site), and regardless of anything to the contrary contained in any third-party software license agreement or end user license agreement, third-party software providers will have no audit rights whatsoever against State systems or networks; and

(k)   Contractor acknowledges that the State cannot indemnify any third parties, including but not limited to any third-party software providers that provide software that will be incorporated in or otherwise used in conjunction with the Services, and that notwithstanding anything to the contrary contained in any third-party software license agreement or end user license agreement, the State will not indemnify any third party software provider for any reason whatsoever.

17.3 DISCLAIMER. EXCEPT FOR THE EXPRESS WARRANTIES IN THIS CONTRACT, CONTRACTOR HEREBY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE UNDER OR IN CONNECTION WITH THIS CONTRACT OR ANY SUBJECT MATTER HEREOF.

18. Insurance.

18.1 Required Coverage.

(a) **Insurance Requirements.** Contractor must maintain the insurances identified below and is responsible for all deductibles. All required insurance must: (a) protect the State from claims that may arise out of, are alleged to arise out of, or result from Contractor's or a subcontractor's performance; (b) be primary and non-contributing to any comparable liability insurance (including self-insurance) carried by the State; and (c) be provided by an company with an A.M. Best rating of "A" or better and a financial size of VII or better.

Insurance Type	Additional Requirements
Commercial General Liability Insurance	
Minimal Limits: $1,000,000 Each Occurrence Limit $1,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations Deductible Maximum: $50,000 Each Occurrence	Contractor must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 2010 07 04 and CG 2037 07 0.
Umbrella or Excess Liability Insurance	
Minimal Limits: $5,000,000 General Aggregate	Contractor must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds.
Workers' Compensation Insurance	
Minimal Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.
Privacy and Security Liability (Cyber Liability) Insurance	
Minimal Limits: $1,000,000 Each Occurrence $1,000,000 Annual Aggregate	Contractor must have their policy: (1) endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds; and (2) cover information security and privacy liability, privacy notification costs, regulatory defense and penalties, and website media content liability.

(b)   If Contractor's policy contains limits higher than the minimum limits, the State is entitled to coverage to the extent of the higher limits. The minimum limits are not intended, and may not be construed to limit any liability or indemnity of Contractor to any indemnified party or other persons.

(c)   If any of the required policies provide **claim-made** coverage, the Contractor must: (a) provide coverage with a retroactive date before the effective date of the contract or the beginning of contract work; (b) maintain coverage and provide evidence of coverage for at least three (3) years after completion of the contract of work; and (c) if coverage is canceled or not renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, the Contractor must purchase extended reporting coverage for a minimum of three (3) years after completion of work.

(d)   Contractor must: (a) provide insurance certificates to the Contract Administrator, containing the agreement or delivery order number, at Contract formation and within 20 calendar days of the expiration date of the applicable policies; (b) require that subcontractors maintain the required insurances contained in this Section; (c) notify the Contract Administrator within 5 business days if any insurance is cancelled; and (d) waive all rights against the State for damages covered by insurance. Failure to maintain the required insurance does not limit this waiver.

18.2 Non-waiver. This **Section 18** is not intended to and is not be construed in any manner as waiving, restricting or limiting the liability of either party for any obligations under this Contract (including any provisions hereof requiring Contractor to indemnify, defend and hold harmless the State).

19. Force Majeure.

19.1 Force Majeure Events. Subject to **Section 19.2**, neither party will be liable or responsible to the other party, or be deemed to have defaulted under or breached this Contract, for any failure or delay in fulfilling or performing any term hereof, when and to the extent such failure or delay is caused by: acts of God, flood, fire or explosion, war, terrorism, invasion, riot or other civil unrest, embargoes or blockades in effect on or after the date of this Contract, national or regional emergency, or any passage of law or governmental order, rule, regulation or direction, or any action taken by a governmental or public authority, including imposing an embargo, export or import restriction, quota or other restriction or prohibition (each of the foregoing, a "**Force Majeure Event**"), in each case provided that: (a) such event is outside the reasonable control of the affected party; (b) the affected party gives prompt written notice to the other party, stating the period of time the occurrence is expected to continue; (c) the affected party uses diligent efforts to end the failure or delay and minimize the effects of such Force Majeure Event.

19.2 State Performance; Termination. In the event of a Force Majeure Event affecting Contractor's performance under this Contract, the State may suspend its performance hereunder until such time as Contractor resumes performance. The State may terminate this Contract by written notice to Contractor if a Force Majeure Event affecting Contractor's performance hereunder continues substantially uninterrupted for a period of five (5) Business Days or more. Unless the State terminates this Contract pursuant to the preceding sentence, any date specifically designated for Contractor's performance under this Contract will automatically be extended for a period up to the duration of the Force Majeure Event.

19.3 Exclusions; Non-suspended Obligations. Notwithstanding the foregoing or any other provisions of this Contract:

      (a)   in no event will any of the following be considered a Force Majeure Event:

          (i)   shutdowns, disruptions or malfunctions of the Contractor Systems or any of Contractor's telecommunication or internet services other than as a result of general and widespread internet or telecommunications failures that are not limited to the Contractor Systems; or

          (ii)   the delay or failure of any Contractor Personnel to perform any obligation of Contractor hereunder unless such delay or failure to perform is itself by reason of a Force Majeure Event; and

      (b)   no Force Majeure Event modifies or excuses Contractor's obligations under **Section 26** (Service Availability and Service Availability Credits), **Section 27.5** (Support Service Level Credits), **Section 10** (State Data), **Section 12** (Confidentiality), **Section 13** (Security), **Section 14** (Disaster Recovery) or **Section 15** (Indemnification), or any Availability Requirement or Support Service Level Requirement.

20. Software Escrow. The parties may enter into a separate intellectual property escrow agreement. Such escrow agreement will govern all aspects of Source Code escrow and release.

21. Effect of Contractor Bankruptcy. All rights and licenses granted by Contractor under this Contract are and shall be deemed to be rights and licenses to "intellectual property," and the subject matter of this agreement, including the Services, is and shall be deemed to be "embodiments" of "intellectual property" for purposes of and as such terms are used in and interpreted under section 365(n) of the United States Bankruptcy Code (the "**Code**") (11 U.S.C. § 365(n) (2010)). The State has the right to exercise all rights and elections under the Code and all other applicable bankruptcy, insolvency and similar laws with respect to this Contract (including all executory Statement of Works). Without limiting the generality of the foregoing, if Contractor or its estate becomes subject to any bankruptcy or similar proceeding, subject to the State's rights of election, all rights and licenses granted to the State under this Contract will continue subject to the respective terms and conditions of this Contract, and will not be affected, even by Contractor's rejection of this Contract.

22. General Provisions.

22.1 Further Assurances. Each party will, upon the reasonable request of the other party, execute such documents and perform such acts as may be necessary to give full effect to the terms of this Contract.

22.2 Relationship of the Parties. The relationship between the parties is that of independent contractors. Nothing contained in this Contract is to be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between the parties, and neither party has authority to contract for or bind the other party in any manner whatsoever.

22.3 Media Releases. News releases (including promotional literature and commercial advertisements) pertaining to this Contract or project to which it relates must not be made without the prior written approval of the State, and then only in accordance with the explicit written instructions of the State.

22.4 Notices. All notices, requests, consents, claims, demands, waivers and other communications hereunder, other than routine communications having no legal effect, must be in writing and addressed to the parties as follows (or as otherwise specified by a party in a notice given in accordance with this Section):

If to Contractor:	151 North Country Club Dr, Mesa, AZ 85201 Email: Contracts@1gec.com Attention: Michael Corbin, Director of Operations
If to State:	525 W. Allegan, 1st Floor, Lansing, MI 48913 Email: BarronJ1@michigan.gov Attention: Jarrod Barron, IT Category Specialist

Notices sent in accordance with this **Section 22.4** will be deemed effectively given: (a) when received, if delivered by hand (with written confirmation of receipt); (b) when received, if sent by a nationally recognized overnight courier (receipt requested); (c) on the date sent by e-mail (with confirmation of transmission), if sent during normal business hours of the recipient, and on the next business day, if sent after normal business hours of the recipient; or (d) on the fifth (5th) day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid.

22.5 Headings. The headings in this Contract are for reference only and do not affect the interpretation of this Contract.

22.6 Assignment. Contractor may not assign or otherwise transfer any of its rights, or delegate or otherwise transfer any of its obligations or performance, under this Contract, in each case whether voluntarily, involuntarily, by operation of law or otherwise, without the State's prior written consent. The State has the right to terminate this Contract in its entirety or any Services or Statements of Work hereunder, pursuant to **Section 7.2**, if Contractor delegates or otherwise transfers any of its obligations or performance hereunder, whether voluntarily, involuntarily, by operation of law or otherwise, and no such delegation or other transfer will relieve Contractor of any of such obligations or performance. For purposes of the preceding sentence, and without limiting its generality, any merger, consolidation or reorganization involving Contractor (regardless of whether Contractor is a surviving or disappearing entity) will be deemed to be a transfer of rights, obligations, or performance under this Contract for which the State's prior written consent is required. Any purported assignment, delegation, or transfer in violation of this **Section 22.6** is void.

22.7 No Third-party Beneficiaries. This Contract is for the sole benefit of the parties and nothing herein, express or implied, is intended to or will confer on any other person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Contract.

22.8 Amendment and Modification; Waiver. This Contract may only be amended, modified or supplemented by an agreement in writing signed by each party's Contract Administrator. No waiver by

any party of any of the provisions hereof is effective unless explicitly set forth in writing and signed by the party so waiving. Except as otherwise set forth in this Contract, no failure to exercise, or delay in exercising, any right, remedy, power or privilege arising from this Contract will operate or be construed as a waiver thereof; nor will any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

22.9 Severability. If any term or provision of this Contract is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other term or provision of this Contract or invalidate or render unenforceable such term or provision in any other jurisdiction. Upon such determination that any term or other provision is invalid, illegal or unenforceable, the parties hereto will negotiate in good faith to modify this Contract so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the greatest extent possible.

22.10   Governing Law. This Contract is governed, construed, and enforced in accordance with Michigan law, excluding choice-of-law principles, and all claims relating to or arising out of this Contract are governed by Michigan law, excluding choice-of-law principles. Any dispute arising from this Contract must be resolved in the Michigan Court of Claims. Complaints against the State must be initiated in Ingham County, Michigan. Contractor waives any objections, such as lack of personal jurisdiction or forum non conveniens. Contractor must appoint agents in Michigan to receive service of process

22.11   Equitable Relief. Each party to this Contract acknowledges and agrees that (a) a breach or threatened breach by such party of any of its obligations under this Contract would give rise to irreparable harm to the other party for which monetary damages would not be an adequate remedy and (b) in the event of a breach or a threatened breach by such party of any such obligations, the other party hereto is, in addition to any and all other rights and remedies that may be available to such party at law, at equity or otherwise in respect of such breach, entitled to equitable relief, including a temporary restraining order, an injunction, specific performance and any other relief that may be available from a court of competent jurisdiction, without any requirement to post a bond or other security, and without any requirement to prove actual damages or that monetary damages will not afford an adequate remedy. Each party to this Contract agrees that such party will not oppose or otherwise challenge the appropriateness of equitable relief or the entry by a court of competent jurisdiction of an order granting equitable relief, in either case, consistent with the terms of this **Section 22.11**.

22.12   Nondiscrimination. Under the Elliott-Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, et seq., the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, et seq., and Executive Directive 2019-09, Vendor and its subcontractors agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex (as defined in Executive Directive 2019-09), height, weight, marital status, partisan considerations, any mental or physical disability, or genetic information that is unrelated to the person's ability to perform the duties of a particular job or position. Breach of this covenant is a material breach of the Contract.

22.13   Unfair Labor Practice. Under 1980 PA 278, MCL 423.321, *et seq.*, the State must not award a contract or subcontract to an employer whose name appears in the current register of employers failing to correct an unfair labor practice compiled under MCL 423.322. This information is compiled by the United States National Labor Relations Board. A contractor of the State, in relation to the contract, must not enter into a contract with a subcontractor, manufacturer, or supplier whose name appears in this register. Under MCL 423.324, the State may void any contract if, after award of the contract, the contractor as an employer or the name of the subcontractor, manufacturer or supplier of the contractor appears in the register.

22.14   Schedules   All Schedules and Exhibits that are referenced herein and attached hereto are hereby incorporated by reference.

Schedule A	Statement of Work
Exhibit 1 to Schedule A	Business Specifications Worksheet
Exhibit 2 to Schedule A	Migration List
Schedule B	Service Level Agreement
Schedule C	Data Security Requirements
Schedule D	Disaster Recovery Plan
Schedule E	Federal Provisions Addendum
Exhibit 1 to Schedule E	Byrd Anti-Lobbying Certification

22.15   Counterparts. This Contract may be executed in counterparts, each of which will be deemed an original, but all of which together are deemed to be one and the same agreement and will become effective and binding upon the parties as of the Effective Date at such time as all the signatories hereto have signed a counterpart of this Contract. A signed copy of this Contract delivered by facsimile, e-mail or other means of electronic transmission (to which a signed copy is attached) is deemed to have the same legal effect as delivery of an original signed copy of this Contract.

22.16   Administrative Fee and Reporting. Contractor must pay an administrative fee of 1% on all payments made to Contractor under the Contract including transactions with the State (including its departments, divisions, agencies, offices, and commissions), MiDEAL members, and other states (including governmental subdivisions and authorized entities). Administrative fee payments must be made by check payable to the State of Michigan and mailed to:

Department of Technology, Management and Budget
Cashiering
P.O. Box 30681
Lansing, MI 48909

Contractor must submit an itemized purchasing activity report, which includes at a minimum, the name of the purchasing entity and the total dollar volume in sales. Reports should be mailed to MiDeal@michigan.gov.

The administrative fee and purchasing activity report are due within 30 calendar days from the last day of each calendar quarter.

22.17   <u>Extended Purchasing Program</u>. This contract is extended to MiDEAL members. MiDEAL members include local units of government, school districts, universities, community colleges, and nonprofit hospitals. A current list of MiDEAL members is available at www.michigan.gov/mideal.

Upon written agreement between the State and Contractor, this contract may also be extended to: (a) other states (including governmental subdivisions and authorized entities) and (b) State of Michigan employees.

If extended, Contractor must supply all Contract Activities at the established Contract prices and terms. The State reserves the right to impose an administrative fee and negotiate additional discounts based on any increased volume generated by such extensions.

Contractor must submit invoices to, and receive payment from, extended purchasing program members on a direct and individual basis.

22.18   <u>Entire Agreement</u>. This Contract, including all Statements of Work and other Schedules and Exhibits, which are hereby expressly incorporated, constitutes the sole and entire agreement of the parties to this Contract with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter. In the event of any conflict between the terms of this Contract and those of any Schedule, Exhibit or other document, the following order of precedence governs: (a) first, this Contract, excluding its Exhibits and Schedules; and (b) second, the Exhibits and Schedules to this Contract as of the Effective Date. NO TERMS ON CONTRACTORS INVOICES, WEBSITE, BROWSE-WRAP, SHRINK-WRAP, CLICK-WRAP, CLICK-THROUGH OR OTHER NON-NEGOTIATED TERMS AND CONDITIONS PROVIDED WITH ANY OF THE SERVICES, OR DOCUMENTATION HEREUNDER WILL CONSTITUTE A PART OR AMENDMENT OF THIS CONTRACT OR IS BINDING ON THE STATE OR ANY AUTHORIZED USER FOR ANY PURPOSE. ALL SUCH OTHER TERMS AND CONDITIONS HAVE NO FORCE AND EFFECT AND ARE DEEMED REJECTED BY THE STATE AND THE AUTHORIZED USER, EVEN IF ACCESS TO OR USE OF SUCH SERVICE OR DOCUMENTATION REQUIRES AFFIRMATIVE ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

SCHEDULE A
STATEMENT OF WORK

1. PURPOSE

Contractor will provide hosting and support services for the Safe Drinking Water Information System (SDWIS) and its supporting sub systems. As part of this support, contractor will be responsible for maintaining development, QA and production environments as needed, as well be responsible for maintaining all SDWIS related software and interfaces/integrations to current versions.

Contractor will provide a Software as a Service (SaaS) solution to support the management and execution of sanitary surveys and certification tracking in compliance with state and federal regulations. Contractor will integrate the solution with the Safe Drinking Water Information System (SDWIS) application for data management, reporting and metrics for both sanitary survey related data and other data maintained in SDWIS.

Contractor's solution must:
- meet EPA Sanitary Survey requirements for public water supplies and State of Michigan security and data requirements,
- support operator certification tracking for safe drinking water programs,
- integrate with the SDWIS software, providing functionality to recognize and manage SDWIS being the system of record for public water supply information,
- provide reporting and metrics for sanitary survey related data, certification related data, and other SDWIS-maintained data,
- allow for future integration with ongoing versions of SDWIS (to include the cloud-based SDWIS solution under development by EPA).

Contractor shall implement the solution in the following phases:
- SDWIS Hosting
- Safe Water Information Management and Reporting (SWIMR-Web, including SWIMR Buddy) product:
  - Contractor will fully implement the SWIMR product for full production use. A one-time perpetual license and annual SaaS fees cover Contractor's time involved to install, train, and monitor progress by the State in using the software. Contractor will provide initial project set-up assistance and annual maintenance for the applications including routine updates to the software where needed. The GEC Software Suite (GECSWS) applications also include ongoing support through Contractor's Knowledge Center and a Zendesk Call Center.
- SWIFT (Safe Water Inspection Field Tool) Survey product:
  - Phase 1: Contractor will implement SWIFT product on a pilot basis for up to twenty-five (25) users for a duration of up to nine (9) months for product evaluation. Pilot will include use of current program data (see Exhibit 2 to Schedule A – Data Migration List) and implementation of functionality to support currently used inspection checklists (approx. 40). At the completion of the phase at the State's discretion, the State will determine whether or not to continue with subsequent phases.
  - Phase 2: At State's option, Contractor will roll out the Sanitary survey solution to support full production use.
- Cert Tracker product:
  - Phase 1: Contractor will implement Cert Tracker product on a pilot basis for up to twenty-five (25) users in two separate EGLE programs (drinking water and wastewater) for a duration of up to six (6) months for product evaluation. Pilot will include use of current program data (see Exhibit 2 to Schedule A – Data Migration List). At the completion of the phase, at the State's discretion, the State will determine whether or not to continue with subsequent phases.

o   Phase 2: At State's option, Contractor will roll out the Cert Tracker solution to support full production use.

Contractor shall make all associated Web Services available to the State beginning at the Contract's Effective Date.

The State reserves the right to purchase any additional services or products from the Contractor during the duration of the Contract.

2.   SPECIFIC STANDARDS
IT Policies, Standards and Procedures (PSP)
All Contractor products and services must comply with all applicable State IT policies and standards. Contractor is required to review all applicable links provided below and comply therewith.

Public IT Policies, Standards and Procedures (PSP):
https://www.michigan.gov/dtmb/0,5552,7-358-82547_56579_56755---,00.html

Note: Not all applicable PSP's are available publicly. Controlled PSP's applicable to the Contract are available after signing and returning to the State the required Nondisclosure Agreement (NDA) agreement.

Application Scanning.
For Contractor provided applications, Contractor, at its sole expense, must provide resources to complete the scanning and the analysis, remediation and validation of vulnerabilities identified by the scan as required by the State Secure Web Application Standards.

Application scanning and remediation must include the following types of scans and activities:
- Dynamic Application Security Testing (DAST) - Scanning interactive application for vulnerabilities, analysis, remediation, and validation (May include IAST). Contractor must either a) grant the State the right to dynamically scan the application code to a deployed version of the solution; or b) in lieu of the State performing a scan, Contractor must provide the State a vulnerabilities assessment after Contractor has used a State approved application scanning tool. These scans must be completed and provided to the State quarterly (dates to be provided by the State) and for each major release. Scans should be completed in a non-production environment with verifiable matching source code and supporting infrastructure configurations.
- Static Application Security Testing (SAST) - Scanning source code for vulnerabilities, analysis, remediation, and validation. For Contractor provided applications, Contractor, at its sole expense, must provide resources to complete the scanning and the analysis, remediation and validation of vulnerabilities identified by application source code scans. These scans must be completed for all source code initially, for all updated source code, and for all code for each major release.
- Software Composition Analysis (SCA) – Third Party and/or Open Source Scanning for vulnerabilities, analysis, remediation, and validation. For software that includes third party and open source software, all included third party software must be documented and the source supplier must be monitored for notification of identified vulnerabilities. SCA scans may be included as part of SAST and DAST scanning or employ the use of as SCA tool to meet the scanning requirements. These scans must be completed for all third-party code initially, for all updated third-party code, and for all third-party code in each major release.

Application scanning and remediation must include the following types of scans and activities as required based on, regulatory requirements, data classification and/or composition, or as identified in contractual agreements.
- If provided as part of the solution, all Native mobile application software must meet the scanning requirements including any interaction with an Application Programming Interface (API)

- Penetration Testing – Simulated attack on the application and infrastructure to identify security weaknesses

Infrastructure Scanning
For Hosted Services, Contractor must ensure the infrastructure and applications are scanned using an approved scanning tool (Qualys, Tenable, or other PCI Approved Vulnerability Scanning Tool) at least monthly and provide the scan's assessments to the State in a format that can be transferred to State and used to track the remediation. Contractor will ensure the remediation of issues identified in the scan according to the remediation time requirements documented in the State's PSPs.

Acceptable Use Policy
To the extent that Contractor has access to the State's computer system, Contractor must comply with the State's Acceptable Use Policy, see https://www.michigan.gov/documents/dtmb/1340.00.01_Acceptable_Use_of_Information_Technology_Standard_458958_7.pdf. . All Contractor Personnel will be required, in writing, to agree to the State's Acceptable Use Policy before accessing the State's system. The State reserves the right to terminate Contractor's access to the State's system if a violation occurs.

Look and Feel / Digital Standards
All software items provided by the Contractor must adhere to the State of Michigan Application/Site standards which can be found at www.michigan.gov/standards.

Mobile Responsiveness
The Contractor's Solution must utilize responsive design practices to ensure the application is accessible via a mobile device.

ADA Compliance
The State is required to comply with the Americans with Disabilities Act of 1990 (ADA), and has adopted a formal policy regarding accessibility requirements for websites and software applications. The State is requiring the Contractor's Solution, where relevant, to level AA of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG) 2.0. Contractor may consider, where relevant, the W3C's Guidance on Applying WCAG 2.0 to Non-Web Information and Communications Technologies (WCAG2ICT) for non-web software and content.   The State may require the Contractor complete a Voluntary Product Accessibility Template for WCAG 2.0 (WCAG 2.0 VPAT) or other comparable document for the Solution. For more information, please see https://www.michigan.gov/documents/dmb/1650.00_209567_7.pdf?20151026134621, https://www.michigan.gov/documents/dtmb/1650.02_669556_7.pdf and https://www.michigan.gov/documents/dtmb/1650.01_669554_7.pdf.

3. **USER TYPE AND CAPACITY**
Contractor's solution must be able to meet the expected number of concurrent Users.

SWIMR:

Type of User	Access Type	Number of Users	Number of Concurrent Users
State employees	Admin	5	5
State employees	Write	95	25

SWIFT:

Term	Type of User	Access Type	Number of Users	Number of Concurrent Users
Pilot	State employees	Admin	5	5
Pilot	State employees	Write	20	20

Full Roll-Out	State employees	Admin	5	5
	State employees	Write	95	25

Cert Tracker:

Term	Type of User	Access Type	Number of Users	Number of Concurrent Users
Pilot	State employees	Admin	5	5
Pilot	State employees	Write	20	20
Pilot	Public citizens	Read	0	0
Full Roll-Out	State employees	Admin	5	5
Full Roll-Out	State employees	Write	70	20
Full Roll-Out	Public citizens	Read	52,716	2000

4. ACCESS CONTROL AND AUTHENTICATION

Contractor's solution must integrate with the State's IT Identity and Access Management (IAM) environment as described in the State of Michigan Digital Strategy (http://www.michigan.gov/dtmb/0,5552,7-150-56345_56351_69611-336646--,00.html), which consist of:
1. MILogin/Michigan Identity, Credential, and Access Management (MICAM)
    a. An enterprise single sign-on and identity management solution based on IBM's Identity and Access Management products including, IBM Security Identity Manager (ISIM), IBM Security Access Manager for Web (ISAM), IBM Tivoli Federated Identity Manager (TFIM), IBM Security Access Manager for Mobile (ISAMM), and IBM DataPower, which enables the State to establish, manage, and authenticate user identities for the State's Information Technology (IT) systems.
2. MILogin Identity Federation
    a. Allows federated single sign-on (SSO) for business partners, as well as citizen-based applications.
3. MILogin Multi Factor Authentication (MFA, based on system data classification requirements)
    a. Required for those applications where data classification is Confidential and Restricted as defined by the 1340.00 Michigan Information Technology Information Security standard (i.e. the proposed solution must comply with PHI, PCI, CJIS, IRS, and other standards).
4. MILogin Identity Proofing Services (based on system data classification requirements)
    a. A system that verifies individual's identities before the State allows access to its IT system. This service is based on "life history" or transaction information aggregated from public and proprietary data sources. A leading credit bureau provides this service.

To integrate with the SOM MILogin solution, Contractor's solution must support SAML or OAuth interfaces for the SSO purposes.

5. DATA RETENTION

Contractor's system must comply with the data retention requirements detailed in the Data Retention Policy available at https://www.michigan.gov/dtmb/0,5552,7-358-82548_21738_31548-96228--,00.html. Contractor will notify the State as needed of any proposed data deletions and will only remove any data so approved by the State.

6. SECURITY

Contractor and Contractor's software must comply with the following:
- The Data Security requirements set forth in **Schedule C**.
- Must provide a solution that is hosted in a FedRAMP authorized environment.
- Must be encrypted in transit and at rest using FIPS validated AES encryption with a key size of 256 bits or higher.
- Must implement NIST compliant multi-factor authentication for privileged/administrative and other access.
- Must remain compliant with FISMA and the NIST Special Publication 800-53 (most recent version) MOD controls using minimum control values as established in the applicable SOM PSP's.

7. END-USER OPERATING ENVIRONMENT

Development teams must accommodate the latest browser versions (including mobile browsers) as well as some pre-existing browsers. To ensure that users with older browsers are still able to access online services, applications must, at a minimum, display and function correctly in standards-compliant browsers and the state standard browser without the use of special plugins or extensions. GEC will ensure the software maintains compatibility with Chrome, Edge Chromium, and Safari.

8. SOFTWARE

Contractor shall implement, support and maintain the Solution, consisting of the following SaaS software:

Software	
SWIMR Web	**SWIMR** (Safe Water Information Management and Reporting) allows states agencies to retrieve, streamline, and improve the speed and accuracy of data management. write letters, create reports, determine Return to Compliance (RTC) and creating XML files for migration to SDWIS. As part of the SWIMR package, SWIMR Buddy is a partnered feature that uses Microsoft Access. SWIMR Buddy connects to both local ODBC connections or web services via the GEC portal. Ad hoc queries can be designed using both connection types, ensuring quality data results in a timely manner.
SWIFT	**SWIFT** (Safe Water Information Field Tool) helps state agencies transform how they conduct electronic site visits (including sanitary surveys, Level 1 and 2 Assessments under the Revised Total Coliform Rule, and other inspections) to assess and monitor the condition of public drinking water facilities; issue standardized reports, and track progress on corrective actions to assure water systems are operating within compliance boundaries.
Cert Tracker	**CT** (Cert Tracker) helps states manage and track their operator certification program. Primacy agency staff and operators can use CT to prepare, approve, and track ongoing compliance with state certification requirements. The product may be used for any certification program, but most commonly is used for operators of public water supplies and wastewater facilities, well drillers, and pump installers.
Web Services	The Web Services support access to the SDWIS database for use in custom developed application. GEC will provide

Software	
	ongoing updates to the Web Services as well as technical support for their implementation and use.

9. SOLUTION REQUIREMENTS

The Solution shall meet the specifications detailed in **Exhibit 1 to Schedule A – Business Specification Worksheet** in the manner described therein.

10. INTEGRATION

Contractor must interface the Solution with the following systems. Note that GEC will not perform the integrations during the Evaluation Periods for Cert Tracker and SWIFT. If EGLE makes a "Go" decision on these solution(s), then the integration and customization would be competed at that time as part of the Full Roll-Out implementation. The cost for these integrations is included in the Contractor Response section of the following tables:

Interface Name	EVAExam
Responsible Party	Scantron
Description	The Wastewater program leverages exam software provided by Scantron for their certification exams. The software is SaaS and supports an export of results, as well as SOAP APIs for integration. Hosting location is actively under review by SOM.
Integration Expectations	SOM expects integration between EVAExam and the Vendor Cert Tracker software.
Technology	See https://www.scantron.com/resources/ee-brochure-higheed/
Frequency	Real-time, daily.
CONTRACTOR RESPONSE	GEC proposes to integrate using APIs provided. Changes made to SOAP endpoints requires changes to the integration. Therefore, tight communication between the EvaSys developer and our development team is requested. We are uncertain of the potential ongoing costs if the SOAP endpoints change. We prefer that the integration is using SSL with a valid certificate.

Interface Name	Centralized Electronic Payment Authorization System (CEPAS)
Responsible Party	SOM Treasury
Description	CEPAS is the State solution for electronic payment authorization and process, to include refunds.

	The solution is expected to process electronic payments real time associated with completed transactions. The solution is expected to include associated appropriate accounting codes with completed transactions and process associated approved refunds (solution will handle the review and approval of refunds, CEPAS integration will support the issuing of the refund for associated electronically processed payments).
Technology	The State of Michigan leverages services provided by First Data, Government Solutions (PayPoint) to support electronic payment processing. *An integration guide is attached for reference.*
Frequency	Real-time, daily.
BIDDER RESPONSE	Upon initiation of the fee review process (which will be defined later), Cert Tracker will query MiCaRS using web services about the status of a particular required fee payment (based on the certifications that the operator must maintain). GEC will enhance Cert Tracker to provide a fee payment button in the fees section. This button will point to CEPAS, if MiCaRS alerts Cert Tracker that the fee has not been paid (for instance, it may say "Make payment".). Pushing the button will direct the user to the CEPAS URL for payment. Upon payment, CEPAS will send a receipt back to Cert Tracker and then Cert Tracker will notify MiCaRS of payment so MiCaRS can tie the payment back to the invoice in MiCaRS. The notification from CEPAS will trigger ability for the user to print off the receipt as confirmation of payment.

If the fee review process (which is the web service query to MiCaRS) determines the fee has been paid, there will be a different message on the button (for instance, "Print receipt"). Cert Tracker will show a receipt that the user can print off for confirmation of payment.

As part of the SaaS agreement for Cert Tracker, GEC will provide EGLE with integration with CEPAS using web services provided to and from CEPAS. This integration will be at no cost. |

Interface Name	**Content Manager 9 (CM9)**
Responsible Party	**SOM DTMB (Records Management)**
Description	CM9 is the State solution for content management, implemented at an enterprise level and managed by DTMB Records Management.

The solution is expected to maintain appropriate meta-data associated with content and store the content in the CM9 solution. CM9 is expected to the be the single source of truth for managed content. |
Integration Expectations	SOM expects integration between CM9 and all of the Vendor software products (SWIFT, SWIMR, Cert Tracker).
Technology	The State of Michigan leverages a contract with Hewlett Packard Enterprises to support use of HPE CM9. *And integration guide is attached for reference.*
Frequency	Real-time, daily.

CONTRACTOR RESPONSE	GEC proposes to integrate use HPE's Content Manager 9.2 REST APIs and has incorporated the cost for integrating with it into the estimate. (GEC assumes EGLE has installed CM9 somewhere and can expose it to us so our applications will have a folder to which we can upload documents/meta data.)

Interface Name	Michigan Cashiering and Receivable System (MiCaRS)
Responsible Party	SOM MDOT Accounting
Description	Michigan Cashiering and Receivable System (MiCaRS) is a three-tier, enterprise web application developed for the State of Michigan and used by 10 of the 19 agencies. MiCaRS is an accounts receivable/revenue processing application that allows users to record, correct, and report state revenue. In addition to supporting direct data entry, it interfaces with many applications that the various agencies use to process agency-specific transactions and collect revenue. MiCaRS transfers agency revenue information to the state's central accounting system (SIGMA).
Integration Expectations	SOM expects integration between MiCaRS Cert Tracker for processing of fees and visibility of payment status for renewals.
Technology	MiCaRS is .NET 4.5.1, Oracle 11g with ODT and ODAC 12.1.0.2.4. Hosted onsite, accessible via RESTful web services.
Frequency	Real-time, daily.
CONTRACTOR RESPONSE	Upon initiation of the fee review process. Cert Tracker will query MiCaRS using web services about the status of a particular required fee payment (based on the certifications that the operator must maintain). GEC must build this web service consumption capability in Cert Tracker. This information from MiCaRS will start a workflow between Cert Tracker, CEPAS, and ultimately, may involve transmitting more information back to MiCaRS, such as notification to MiCaRS when CEPAS confirms that fees have been paid. This last step is needed so Cert Tracker can notify MiCaRS of payment and MiCaRS can tie the payment back to the invoice in MiCaRS.

If the fee review process (which is the web service query to MiCaRS) determines the fee has been paid, there will be a different message on the fee payment button noted in the description above for CEPAS. For instance, the button could display "Print receipt".

GEC proposes to integrate with MiCaRS using RESTful web services, which are noted to be available. |

Interface Name	MiLogin
Responsible Party	SOM DTMB
Description	MiLogin is the State's IT Identity and Access Management (IAM) environment as described in the State of Michigan Digital Strategy

	(http://www.michigan.gov/dtmb/0,5552,7-150-56345_56351_69611-336646--,00.html).
Integration Expectations	SOM expects integration with MiLogin for all vendor provided applications requiring credentials for use.
Technology	See provided reference.
Frequency	With each authentication, daily.
CONTRACTOR RESPONSE	GEC proposes to integrate using OAuth interfaces for the SSO purposes. We could not confirm if this interface is available as a .Net library from SOM, so GEC added integration costs to build this interface.

Interface Name	**ParSystem (ParScore and ParTestby Scantron)**
Responsible Party	**SOM EGLE Managed**
Description	ParScore is the workstation-based software in use to read and create *.CSV files representing data filled out on the Scantron bubble sheets. The workstation user runs the workstation software, scans the paper bubble sheets, and the ParScore produces the files representing the data on the bubble sheets. These results need to be maintained in the new solution associated with the applicant that took the associated test (test outcomes).
Integration Expectations	SOM expects integration between ParScore and the Vendor Cert Tracker software.
Technology	Workstation standards are represented in the SOM technology standards (see reference in RFP Project Scope).
Frequency	Testing is offered two times a year.
CONTRACTOR RESPONSE	Cert Tracker existing functionality has a batch upload process that can be used to pull and return data to Cert Tracker. For example, it uses CSV format to generate a file that can be provided to the test site with the needed information for the test roster (e.g., Operator ID, Certification level, location of test). Cert Tracker also already allows for individual or batch upload of data (in CSV format) and can evaluate the data and assign the information to the correct operator if the information is associated to the Operator ID from Cert Tracker. ParScore does not have a current automated process to move data, e.g., the test score, from the scanned bubble sheets generated by ParScore into the format needed to return the data to Cert Tracker. GEC proposes to use a custom data transformation service to automate this process to import the data into a format that can be uploaded back to Cert Tracker and associated to the correct operator.

Interface Name	ScanTools (by Scantron)
Responsible Party	SOM EGLE Managed
Description	In parallel to this initiative, the EGLE is planning to upgrade ParScore to ScanTools to enable pre-printing content on bubble sheets prior to use, as well as scanning and capturing of student completed bubble sheets used for exams. The new solution is expected to provide the data for pre-printing specific to the approved exam applications for a testing cycle, as well as allow for the import of *.DAT files to capture the exam outcomes.
Integration Expectations	SOM expects integration between ScanTools and the Vendor Cert Tracker software.
Technology	Workstation standards are represented in the SOM technology standards (see reference in RFP Project Scope).
Frequency	Testing is offered two times a year.
CONTRACTOR RESPONSE	Cert Tracker has existing functionality and a batch upload process that uses csv format to provide the needed information. GEC can provide the data that ScanTools needs – using the format and ability to filter that would be required – with customization.

Interface Name	SDWIS (and next generation/version)
Responsible Party	EPA provided, SOM DTMB Managed prior to this contract
Description	SDWIS is a solution provided by the EPA to collect and manage data and reporting associated with safe drinking water. Data maintained by SDWIS will be considered the source of truth, leveraging integration with the new solution to both read and propagate updates to the data maintained in SDWIS.
Integration Expectations	SOM expects integration with SDWIS for all vendor provided applications using data maintained in SDWIS (SDWIS is the system of record for data it maintains).
Technology	See EPA published information.
Frequency	Real-time, on demand, daily.
CONTRACTOR RESPONSE	As part of the SaaS agreement for each product, GEC will provide EGLE with integration with SDWIS/State and the new SDWIS modernization product.

Interface Name	Michigan Environmental Health and Drinking Water Information System (MiEHDWIS)
Responsible Party	SOM EGLE Managed (via a support vendor)
Description	The MiEHDWIS application is a web based vendor hosted application supporting EGLE Environmental Health programs and Safe Drinking Water. Initial releases were made available in 2020 and will continue to expand in program support with additional releases into 2022.

Integration Expectations	SOM expects integration with MiEHDWIS to support data included in SWIMR reports, as well the potential for MiEHDWIS to have read only access to in SWIFT and Cert Tracker for inclusion in MiEHDWIS dashboards and reporting.
Technology	MiEHDWIS is a .NET and SQL Server based application hosted in a FedRAMP compliant cloud datacenter. The preferred integration method is REST (JSON payload) over HTTPS.
Frequency	Real-time, on demand, daily.
CONTRACTOR RESPONSE	As part of the SaaS agreement for each product, GEC will provide EGLE with integration with MiEHDWIS. GEC will use VPN connectivity to provide secure integration between the GEC Azure hosting environment and the MiEHDWIS Azure environment. The cost for the VPN connectivity has been reflected in the SDWIS hosting costs.

11. MIGRATION
Contractor must migrate the following data (see Exhibit 2 to Schedule A – Data Migration List):
- OTCTS
- CEC Data base.accdb
- construction master.mdb
- INDUSTRIAL MASTER.mdb
- Industrial mastersw.mdb
- MUNICIPAL MASTER.mdb
- Soil Erosion Control.mdb

12. TRAINING SERVICES
Contractor must provide administration and end-user training for implementation, go-live support, and transition to customer self-sufficiency both for the initial implementation and when delivering upgrades. Contractor must provide a training plan for go-live support and transition to self-support, including options and details such as the number of dedicated personnel, staff location, hours available and duration of go-live support.

At the State's discretion, State may require contractor to record and make available recorded content for the State's re-use and reference.

Contractor will train as detailed below.

SWIMR:
GEC provides 4 two-hour training sessions via webinars to show users and administrators how to use the application.

SWIFT:
Phase 1.
Contractor will conduct up to (4) 1-hour webinars with State designated admins and users during the evaluation project to familiarize State designated staff with the application's features. The first webinar will occur as soon as the software is available, and a meeting can be scheduled. The other three webinars will be at the State's request. Once the first webinar is concluded, staff may begin using the application. Throughout the evaluation period, GEC's help desk (which is a Zendesk ticketing system) and online Knowledge Center will be available to support the users and admins.

Phase 2.

Contractor will provide 10 hours of training to State designated staff, which includes review of a template to help develop the sanitary survey question sets. Training may be conducted via phone calls or webinars at the State's request. Contractor will provide 2 four-hour training sessions via webinars to show users how to use the application. Contractor will provide 2 three-hour training sessions to State designated staff, which includes instructions on maintaining templates, associating SDWIS deficiencies to components, and managing users.

Cert Tracker:
Phase 1.
Contractor will conduct up to 4 one-hour webinars with State designated admins and users during the evaluation project to familiarize State designated staff with the application's features. The first webinar will occur as soon as the software is available, and a meeting can be scheduled. The other three webinars will be at the State's request. Once the first webinar is concluded, staff may begin using the application. Throughout the evaluation period, GEC's help desk (which is a Zendesk ticketing system) and online Knowledge Center will be available to support the users and admins.

Phase 2.
Contractor will provide 10 hours of additional training support to State project administrators, which includes review of action items and task report templates to help develop the career paths and other tools needed to track certification programs. Training may be conducted via phone calls or webinars at the State's request.

Contractor also will provide 4 two-hour training sessions via webinars to show users how to use the application, and 6 one-hour training sessions to State designated staff, which includes instructions on maintaining letter and email templates, managing users, and project tracking features.

13. HOSTING, SUPPORT AND OPERATIONS
Contractor will provide hosting, support and operations in accordance with **Schedule B**.

14. DOCUMENTATION
For documentation related to the licensed products governed by a SaaS, GEC uses its Knowledge Center. The Knowledge Center includes details on how to use the software (segregated by users and administrators), dashboards with key information and metrics, examples of Frequently Asked Questions, a blog with notices about key information such as release notes and installations, and links to related articles. It also has search capabilities. Note that the Knowledge Center does not include any intellectual property about GEC Commercial Off the Shelf applications. The Knowledge Center will be made available to users as noted below.

For customization that GEC develops specifically for Michigan to ensure integration with non-GEC applications or databases, GEC will provide all user manuals, operating manuals, technical manuals and any other instructions, specifications, documents or materials, in any form or media, that describe the functionality, installation, testing, operation, use, maintenance, support, features or requirements of the Software. This material will not include any intellectual property for GEC Commercial Off the Shelf products. Contractor must develop and submit for State approval complete, accurate, and timely Solution documentation to support all users, and will update any discrepancies, or errors through the life of the contract. Some of this information may be moved into the GEC Knowledge Center, enabling the State to resolve common questions and issues prior to initiating formal support requests.

Support provided by GEC includes:
- Phone support will be available weekdays from 9:00 am - 5:00 pm Eastern Standard Time (480) 827-9827.
- GEC offers 24-hour x 7 day access to our complete online Knowledge Center and user community https://gecsws.zendesk.com.

- Unlimited email support will be provided through our Zendesk ticketing system. An email sent to support@1gec.com generates a help desk ticket. Responses to Zendesk tickets are tightly integrated to the Knowledge Center.
- GEC responds to tickets in under four hours during normal business hours and strives to resolve all requests, even requests outside business hours, as quickly as possible. The nature of the request determines the length of time to resolve the request.

15. TRANSITION SERVICES

Upon termination or expiration of the agreement, Contractor must, for a period of time specified by the State (not to exceed 90 calendar days), provide all reasonable transition assistance requested by the State, to allow for the expired or terminated portion of the agreement to continue without interruption or adverse effect, and to facilitate the orderly transfer of the services to the State or its designees. Such transition assistance may include but is not limited to: (a) continuing to perform the services at the established rates; (b) taking all reasonable and necessary measures to transition performance of the work, including all applicable services to the State or the State's designee; (c) taking all necessary and appropriate steps, or such other action as the State may direct, to preserve, maintain, protect, or return (in a format specified by the State) to the State all data stored in the solution at no additional cost; and (d) preparing an accurate accounting from which the State and Contractor may reconcile all outstanding accounts.

16. CONTRACTOR KEY PERSONNEL

Contractor designates the following persons as Key Personnel:

Contractor Contract Administrator. Role defined in Contract Terms.

Contractor
Michael Corbin
151 N Country Club Dr, Mesa AZ 85201
602-301-6802
mike.corbin@1gec.com

Contractor Project Manager. Role will serve as the primary contact with regard to services who will have the authority to act on behalf of the Contractor in matters pertaining to the implementation services.

Contractor
Kim Clemente
151 N Country Club Dr, Mesa AZ 85201
407-720-0477
kim.clemente@1gec.com

Contractor Service Manager. Role defined in Contract Terms.

Contractor
Seth Corbin
151 N Country Club Dr, Mesa AZ 85201
480-262-8339
seth.corbin@1gec.com
Support email: Support@1gec.com

Contractor Security Officer. Role defined in Contract Terms.

Contractor

Jesse Dahl
151 N Country Club Dr, Mesa AZ 85201
480-371-6700
jesse.dahl@1gec.com

17. CONTRACTOR PERSONNEL REQUIREMENTS

The Contractor must present certifications evidencing satisfactory completion of background checks through ADP Screening Services. Contractor must present certifications evidencing satisfactory Michigan State Police Background checks ICHAT and drug tests for all staff who will access the State's network, either directly or through virtual private network. Contractor will pay for all costs associated with ensuring their staff meets all requirements.

18. STATE RESOURCES/RESPONSIBILITIES

The State will provide the following resources as part of the implementation and ongoing support of the Solution.

State Contract Administrator. The State Contract Administrator is the individual appointed by the State to (a) administer the terms of this Contract, and (b) approve and execute any Change Notices under this Contract.

State Project Manager. The State Project Manager will serve as the primary contact with regard to implementation Services who will have the authority to act on behalf of the State in approving Deliverables, and day to day activities.

Agency Business Owner. The Agency Business Owner will serve as the primary contact for the business area with regard to business advisement who will have the authority to act on behalf of the State in matters pertaining to the business Specifications.

State Technical Lead. The State Technical Lead will serve as the primary contact with regard to technical advisement.

19. MEETINGS

Contractor must attend the following meetings at no additional cost to the State. At start of the engagement, the Contractor Project Manager must facilitate a project kick off meeting for all solutions with the support from the State's Project Manager and the identified State resources to review the approach to accomplishing the project, schedule tasks and identify related timing, and identify any risks or issues related to the planned approach. From project kick-off until final acceptance and final go-live, Contractor Project Manager must facilitate weekly meetings (or more if determined necessary by the parties) to provide updates on implementation progress. Following go-live, Contractor must facilitate monthly meetings (or more or less if determined necessary by the parties) to ensure ongoing support success.

20. PROJECT CONTROL & REPORTS

Once the Project Kick-Off meeting has occurred, the Contractor Project Manager will monitor project implementation progress and report on a weekly basis to the State's Project Manager using shared documents and tools contained within Microsoft products. The data will include the following until final go-live:
- Progress to complete milestones, comparing forecasted completion dates to planned and actual completion dates
- Accomplishments during the reporting period, what was worked on and what was completed during the current reporting period

- Hours spent under the SaaS agreement will not be tracked during these meetings. For special projects (e.g., customization or data migration) conducted on a Time and Materials basis, GEC will indicate the number of hours expended during the past week, and the cumulative total to date for the special project. Also, for these same special projects, GEC will state whether the remaining hours are sufficient to complete the special project.
- Tasks planned for the next reporting period.
- Identify any existing issues which are impacting the project and the steps being taken to address those issues.
- Identify any new risks and describe progress in mitigating high impact/high probability risks previously identified.
- For special projects, GEC will indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

Once the SDWIS hosting and support services are in production, Contractor will provide quarterly user reports to EGLE for any user management that EGLE cannot do administratively through native application functionality. User reports will include user names, access roles and usage information. Contractor will complete user management updates as directed and approved by EGLE to users that cannot be administratively manage natively through application functionality.

21. MILESTONES AND DELIVERABLES
The milestone schedule and associated deliverables are set forth below. Note that "days' are business days. Start dates and incurrence of associated costs for use of the pilot and full roll-out of licensed products is at the State's discretion. State has the option to adjust the pilot durations at its discretion.
A few assumptions should be noted:
- SWIFT pilot will only include the GEC standard question set, reports, and site visit letter. Customization will be done in the Full Roll-Out, if a "GO' decision is made. Note: no changes will be made to the standard question set, reports, and site visit letter.
- SWIFT requires no data migration.
- For Cert Tracker, GEC will migrate data in the pilot knowing there may be data quality issues. The data quality issues will be addressed after the "Go/No-go" decision is made and during the Full Roll-Out (if it's a "Go"). For similar reasons, the pilot does not include customization of CT to accommodate integration with all EGLE databases listed in this contract. During the pilot, staff will use the COTS.
- The data quality review for Cert Tracker migration and process to address identified issues will be ongoing as issues are identified during the planning stages and while the pilot is underway. Some data quality issues will be addressed in EGLE databases prior to final migration by EGLE and other issues may be addressed by GEC in the data provided from EGLE prior to final migration. This step is the "cut over", which is when EGLE no longer does double data entry in their legacy system and CT, but instead does all work in CT.
- Actual pilot start dates will be determined by the parties' mutual agreement.

Milestone Event	Associated Milestone Deliverable(s)	Schedule
Project Planning	• Project Kickoff • Project Schedule • Keylight Plan	Contract Execution + 10 days
Host SDWIS/State	• Requirements Validation	SDWIS/State project begin date + 10 days
	• 1-Configuration Plan	Completed requirements validation + 10 days
	• 2-Implementation Plan	Completed requirements validation + 10 days
	• 3-Training Plan	Completed requirements validation + 10 days

Milestone Event	Associated Milestone Deliverable(s)	Schedule
	• 4-Test Plan	Completed requirements validation + 10 days
	• State approves Plans 1-4	Receipt of plans + 5 days
	• Complete Implementation/Configuration of GEC Test Environment	State plan approval + 5 days
	• State completes testing of GEC Test Environment	GEC Test complete + 5 days
	• Complete GEC Production Environment	Keylight ATO + 10 days
	• Accept Production Go-Live	Complete GEC Production Environment + 10 days
	• State completes testing of Production Environment	Production Go-Live + 5 days
SWIMR	• Requirements Validation	SWIMR Start + 10 days
	• Provide SWIMR example reports	Completed requirements validation + 10 days
	• 1-Configuration Plan	Completed requirements validation + 10 days
	• 2-Implementation Plan	Completed requirements validation + 10 days
	• 3-Training Plan	Completed requirements validation + 10 days
	• 4-Test Plan	Completed requirements validation + 10 days
	• State approves Plans 1-4 and identifies at least 1 SWIMR report	Receipt of plans + 5 days
	• Develop 1st SWIMR report for review	Identified report + either 5 days (existing SWIMR report) or up to 20 days (custom report)
	• Provide comments on SWIMR report	Develop report + 5 days
	• Complete revisions of SWIMR report	Provide comments + either 5 days (existing SWIMR report) or up to 10 days (custom report)
	• Acceptance of at least 1 SWIMR Report	Complete SWIMR Reports + 5 days
	• Complete Implementation/Configuration of GEC Test Environment	State Plan Approval + 5 days
	• Complete Admin Training	Acceptance of 1st SWIMR report + 5 days
	• State completes testing of GEC Test Environment	Complete Admin Training + 5 days
	• Complete User Training	State completes testing of Test Environment + 10 days
	• Keylight ATO	State completes testing of Test Environment + 10 days
	• Complete GEC Production Environment	Keylight ATO + 10 days
	• Accept Production Go-Live	Complete GEC Production Environment + 10 days

Milestone Event	Associated Milestone Deliverable(s)	Schedule
	• State completes testing of Production Environment	Production Go-Live + 5 days
SWIFT Pilot Planning	• 1-Pilot Share Standard Question Set, Reports, and Site Visit Letter • 2-Pilot Configuration Plan • 3-Pilot Implementation Plan • 4-Pilot Training Plan • 5-Pilot Test Plan	SWIFT Start (which will occur after EGLE SDWIS/State Hosting project has been completed) + 20 days
	• State approves Plans 2-5	Receipt of Plans + 5 days
SWIFT Pilot	• Complete Pilot Implementation/Configuration of GEC Test Environment	State Plan Approval + 5 days
	• Complete Admin Training	Complete Pilot Test Environment + 5 days
	• State completes testing of Pilot Test Environment	Complete Admin Training + 5 days
	• Complete Pilot User Training	State completes testing of Pilot Test Environment + 10 days
	• Keylight ATO	State completes testing of Pilot Test Environment + 10 days
	• Complete GEC Pilot Production Environment	Keylight ATO + 10 days
	• Accept Pilot Production Go-Live	Complete GEC Pilot Production Environment + 10 days
	• State completes testing of Pilot Production Environment	Pilot Production Go-Live + 5 days
	• Complete Pilot	SWIFT Start + 9 months
	• Go/No-go Decision	SWIFT Start + no more than 9 months
SWIFT Full Roll-out Planning	• Refine Configuration Plan • Refine Implementation Plan • Refine Training Plan • Refine Test Plan	Go/No-go + 10 days
	• State completes EGLE Question Set, Reports, and Site Visit Letter	Go/No-go + 10 days
	• State approves final Plans	Receipt of Plans + 5 days
SWIFT Full Roll-Out	• Complete Full Roll-Out Implementation/Integration/Configuration of GEC Test Environment	State Plan Approval + 2 months
	• State completes testing of Full Roll-Out Test Environment	Complete Configuration of Full Roll-Out GEC Test Environment + 5 days
	• Complete Full Roll-Out User Training	State completes testing of Full Roll-Out Test Environment + 10 days

Milestone Event	Associated Milestone Deliverable(s)	Schedule
	• Complete GEC Full Roll-Out Production Environment	State completes testing of Full Roll-Out Test Environment + 10 days
	• Accept Full Roll-Out Go-Live	Complete GEC Full Roll-Out Production Environment + 10 days
Cert Tracker	• Requirements Validation	Cert Tracker Start + 10 days
Cert Tracker Pilot Planning	• 1-Pilot Data Migration Plan • 2-Pilot Configuration Plan • 3-Pilot Implementation Plan • 4-Pilot Training Plan • 5-Pilot Test Plan	Cert Tracker Start + 20 days
	• State approves Plans 1-5	Receipt of Plans + 5 days
Cert Tracker Pilot	• Complete Pilot Implementation/Configuration in GEC Test Environment	State Plan Approval + 5 days
	• Complete Pilot Data Migration	Complete Pilot Test Environment + 10 days
	• State accepts Data Migration	Complete Pilot Data Migration + 5 days
	• Complete Admin Training	State Accepts Data + 5 days
	• State completes testing of Pilot Test Environment	Complete Admin Training + 5 days
	• Complete Pilot User Training	State completes testing of Pilot Test Environment + 10 days
	• Keylight ATO	State completes testing of Pilot Test Environment + 10 days
	• Complete GEC Pilot Production Environment	Keylight ATO + 10 days
	• Accept Pilot Production Go-Live	Complete GEC Pilot Production Environment + 10 days
	• State completes testing of Pilot Production Environment	Pilot Production Go-Live + 5 days
	• Complete Pilot	Cert Tracker Start + 6 months
	• Go/No-go Decision	Cert Tracker Start + no more than 6 months
Cert Tracker Full Roll-out Planning	• Refine Data Migration Plan • Refine Configuration Plan • Refine Implementation Plan • Refine Training Plan • Refine Test Plan	Go/No-go + 10 days
	• State approves final Plans	Receipt of Plans + 5 days
Cert Tracker Full Roll-Out	• Complete Full Roll-Out Implementation/Integration/Configuration of GEC Test Environment	State Plan Approval + 2 months

Milestone Event	Associated Milestone Deliverable(s)	Schedule
	• Address Data Quality Issues identified in Pilot Data Migration Plan for all EGLE Databases	Prior to Final Migration of DW and WW Operator Databases
	• Cut-over date	Cut-over date
	• Complete Full Roll-Out Data Migration	Cut-over date + 10 days
	• Complete Full Roll-Out GEC Test Environment	Cut-over date + 10 days
	• State completes testing of Full Roll-Out Test Environment	Complete Configuration of Full Roll-Out GEC Test Environment + 5 days
	• Complete Full Roll-Out User Training	State completes testing of Full Roll-Out Test Environment + 10 days
	• Complete GEC Full Roll-Out Production Environment	State completes testing of Full Roll-Out Test Environment + 10 days
	• Accept Full Roll-Out Go-Live	Complete GEC Full Roll-Out Production Environment + 10 days
Production Support Services	Ongoing after Final Acceptance	Ongoing

The Contractor Project Manager will be responsible for maintaining an MS Project schedule (or approved alternative) identifying tasks, durations, forecasted dates and resources – both Contractor and State - required to meet the timeframes as agreed to by both parties.

Changes to scope, schedule or cost must be addressed through a formal change request process with the State and the Contractor to ensure understanding, agreement and approval of authorized parties to the change and clearly identify the impact to the overall project.

SUITE Documentation
In managing its obligation to meet the above milestones and deliverables, the Contractor is required to utilize the applicable State Unified Information Technology Environment (SUITE) methodologies, or an equivalent methodology agreed to by the State.

SUITE's primary goal is the delivery of on-time, on-budget, quality systems that meet customer expectations. SUITE is based on industry best practices, including those identified in the Project Management Institute's PMBoK and the Capability Maturity Model Integration for Development. It was designed and implemented to standardize methodologies, processes, procedures, training, and tools for project management and systems development lifecycle management. It offers guidance for efficient, effective improvement across multiple process disciplines in the organization, improvements to best practices incorporated from earlier models, and a common, integrated vision of improvement for all project and system related elements.

While applying the SUITE framework through its methodologies is required, SUITE was not designed to add layers of complexity to project execution. There should be no additional costs from the Contractor, since it is expected that they are already following industry best practices which are at least similar to those that form SUITE's foundation.

SUITE's companion templates are used to document project progress or deliverables. In some cases, Contractor may have in place its own set of templates for similar use. Because SUITE can be tailored to fit

specific projects, project teams and State project managers may decide to use the Contractor's provided templates, as long as they demonstrate fulfillment of the SUITE methodologies.

22. PRICING

5-Year Total
The table below summarizes the anticipated contract costs, excluding any future enhancements which the parties may later agree to add.

Product	5-Year Total
SWIMR	$274,791
SWIFT	$326,113
Cert Tracker - DW	$201,569
Cert Tracker - WW	$152,439
Web Services	$44,200
SDWIS Hosting	$535,779
TOTAL	**$1,534,892**

Cost Summary

Incurrence of costs and associated billing is dependent on the State's agreement to start the related services.   The start or use of any of the licensed products, as well as the duration of the pilot and transition between pilot and full roll out is at the State's discretion. Any changes to pilot duration may result in a change in fixed price pilot fee for the adjusted duration.

The pilot pricing reflects a partial payment of the perpetual one-time license fee and a fixed cost for the maximum number of users for the duration of the pilot.

For each pilot product in which the State agrees to proceed to implement the product into full production, (a) the State will incur the balance of the perpetual license fee the first day of the third month following the pilot completion or the first month of the full production use, whichever comes first; (b) the State will incur the annual SaaS fee the first month of the full production use.

The tables below detail the anticipated contract costs summarized above:

SWIMR

Billing Point	Invoice Date	Invoice Item	Item Qty	Item Cost	Discount	Item Total
SWIMR Year 1 (2021)	5/1/2021	Perpetual License	1	$39,000	0%	$39,000
		Annual SaaS Fee, up to 100 users	1	$43,214	5%	$41,054
Integration	6/1/2021	Integration	1	$20,000	0%	$20,000
SWIMR Year 2 (2022)	5/1/2022	Annual SaaS Fee, up to 100 users	1	$44,295	5%	$42,080
SWIMR Year 3 (2023)	5/1/2023	Annual SaaS Fee, up to 100 users	1	$45,402	5%	$43,132
SWIMR Year 4 (2024)	5/1/2024	Annual SaaS Fee, up to 100 users	1	$46,537	5%	$44,210
SWIMR Year 5 (2025)	5/1/2025	Annual SaaS Fee, up to 100 users	1	$47,700	5%	$45,315
					TOTAL	**$274,791**

SWIFT

Billing Point	Invoice Date	Invoice Item	Item Qty	Item Cost	Discount	Item Total
SWIFT Pilot (9 months)	7/1/2021	Pilot Perpetual License	1	$14,000	0%	$14,000
		Pilot SaaS Fee, up to 25 Users	1	$25,500	0%	$25,500

Billing Point	Invoice Date	Invoice Item	Item Qty	Item Cost	Discount	Item Total
SWIFT Environment Monthly Operations Hold	4/1/2022	Environment Monthly Operations Hold	1	$1,400	0%	$1,400
SWIFT Environment Monthly Operations Hold	5/1/2022	Environment Monthly Operations Hold	1	$1,400	0%	$1,400
SWIFT Integration Month 1	4/1/2022	Integration	1	$2,500	0%	$2,500
SWIFT Integration Month 2	5/1/2022	Integration	1	$2,500	0%	$2,500
SWIFT Perpetual License Balance	6/1/2022	Perpetual License Balance	1	$50,000	0%	$50,000
SWIFT Year 1	6/1/2022	Annual SaaS Fee, up to 100 users	1	$59,284	5%	$56,319
SWIFT Year 2	6/1/2023	Annual SaaS Fee, up to 100 users	1	$60,766	5%	$57,727
SWIFT Year 3	6/1/2024	Annual SaaS Fee, up to 100 users	1	$62,285	5%	$59,171
SWIFT Year 4 (11 months)	6/1/2025	Annual SaaS Fee, up to 100 users	1	$58,522	5%	$55,596
					TOTAL	$326,113

CERT TRACKER – DRINKING WATER

Billing Point	Invoice Date	Invoice Item	Item Qty	Item cost	Discount	Item Total
CT Pilot (6 months)	7/1/2021	Pilot Perpetual License	1	$19,500	0%	$19,500
		Pilot SaaS Fee, up to 25 State Users	1	$19,680	0%	$19,680
CT Environment Monthly Operations Hold	1/1/2022	Environment Monthly Operations Hold	1	$1,400	0%	$1,400
CT Environment Monthly Operations Hold	2/1/2022	Environment Monthly Operations Hold	1	$1,400	0%	$1,400
CT Integration/Mi	1/1/2022	Integration	1	$6,667	0%	$6,667

Billing Point	Invoice Date	Invoice Item	Item Qty	Item cost	Discount	Item Total
gration Month 1						
		Migration	1	$2,500	0%	$2,500
CT Integration/Migration Month 2	2/1/2022	Integration	1	$6,667	0%	$6,667
		Migration	1	$2,500	0%	$2,500
CT Perpetual License Balance	3/1/2022	Perpetual License Balance	1	$19,500	0%	$19,500
CT Year 1	3/1/2022	Annual SaaS Fee, up to 75 State users and unlimited non-State Users	1	$39,373	5%	$37,405
CT Year 2	3/1/2023	Annual SaaS Fee, up to 75 State users and unlimited non-State Users	1	$40,358	5%	$38,340
CT Year 3	3/1/2024	Annual SaaS Fee, up to 75 State users and unlimited non-State Users	1	$41,367	5%	$39,298
CT Year 4 (2 months)	3/1/2025	Annual SaaS Fee, up to 75 State users and unlimited non-State Users	1	$7,067	5%	$6,713
					TOTAL	$201,569

CERT TRACKER – WASTE WATER

Billing Point	Invoice Date	Invoice Item	Item Qty	Item cost	Discount	Item Total
CT Pilot (6 months)	7/1/2021	Pilot Perpetual License	0	$0	0%	$0*
		Pilot SaaS License, up to 25 State Users	0	$0	0%	$0*
CT Environment Monthly Operations Hold	1/1/2022	Environment Monthly Operations Hold	0	$0	0%	$0*
CT Environment Monthly Operations Hold	2/1/2022	Environment Monthly Operations Hold	0	$0	0%	$0*
CT Integration/Migration Month 1	1/1/2022	Integration	1	$18,334	0%	$18,334
		Migration	1	$5,000	0%	$5,000

	Invoice Date	Invoice Item	Item Qty	Item cost		Item Total
CT Integration/Migration Month 2	2/1/2022	Integration	1	$18,334	0%	$18,334
		Migration	1	$5,000	0%	$5,000
CT Perpetual License Balance	3/1/2022	Perpetual License Balance	0	$19,500	0%	$0*
CT Year 1	3/1/2022	Annual SaaS Fee, up to 5 State users and unlimited non-State Users	1	$34,204	5%	$32,494
CT Year 2	3/1/2023	Annual SaaS Fee, up to 5 State users and unlimited non-State Users	1	$35,059	5%	$33,306
CT Year 3	3/1/2024	Annual SaaS Fee, up to 5 State users and unlimited non-State Users	1	$35,936	5%	$34,139
CT Year 4 (2 months)	3/1/2025	Annual SaaS Fee, up to 5 State users and unlimited non-State Users	1	$6,139	5%	$5,832
					TOTAL	**$152,439**

Amounts are accounted for in Cert Tracker for Drinking Water

WEB SERVICES

Billing Point	Invoice Date	Invoice Item	Item Qty	Item cost		Item Total
Web Services Year 1	5/1/2021	Perpetual License	1	$15,000	0%	$15,000
		Annual SaaS Fee	1	$5,500	0%	$5,500
Web Services Year 2	5/1/2022	Annual SaaS Fee	1	$5,665	0%	$5,665
Web Services Year 3	5/1/2023	Annual SaaS Fee	1	$5,835	0%	$5,835
Web Services Year 4	5/1/2024	Annual SaaS Fee	1	$6,010	0%	$6,010
Web Services Year 5	5/1/2025	Annual SaaS Fee	1	$6,190	0%	$6,190
					TOTAL	**$44,200**

SDWIS HOSTING AND SUPPORT

Billing Point	Invoice Date	Invoice Item	Item Qty	Item cost	Discount	Item Total
SDWIS Hosting	6/1/2021	SDWIS ATO Support	1	$7,800	0%	$7,800
		SDWIS Transition to GEC	1	$21,400	0%	$21,400
2021 Monthly	Monthly Starting 5/1/2021	Monthly Hosting	12	$8,069	0%	$96,831

Billing Point	Invoice Date	Invoice Item	Item Qty	Item cost	Discount	Item Total
2022 Monthly	Monthly Starting 5/1/2022	Monthly Hosting	12	$8,251	0%	$99,007
2023 Monthly	Monthly Starting 5/1/2023	Monthly Hosting	12	$8,437	0%	$101,249
2024 Monthly	Monthly Starting 5/1/2024	Monthly Hosting	12	$8,630	0%	$103,557
2025 Monthly	Monthly Starting 5/1/2025	Monthly Hosting	12	$8,828	0%	$105,935
					TOTAL	$535,779

Perpetual One-Time License Fees

Perpetual one-time license fees are based on the following:

Product	Perpetual Fee – Pilot	Perpetual Fee – Balance	Total
SWIMR	NA	$39,000	$39,000
SWIFT	$14.000	$50,000	$64,000
Cert Tracker	$19,500	$19,500	$39,000
Web Services	NA	$15,000	$15,000

Fixed Price Pilot Fees

Fixed Price pilot fees are based on the following:

Product	Pilot Duration	Maximum Users	Cost
SWIFT	9 Months	25	$25,500
Cert Tracker	6 Months	25 State	$19,680

Annual SaaS Maintenance Fees

Annual SaaS Maintenance Fees are based on the costs associated with the following user count brackets for the calendar year in which the start of the annual fee is incurred. Annual fees are invoiced the first month in which the annual cycle starts. The State can adjust the user counts as needed prior to the start of each annual cycle. Annual cycles less than a year in duration will be pro-rated (e.g. last cycle of contract period).

Product	User Count Range	2021	2022	2023	2024	2025	2026
SWIMR	1-5	$32,011	$32,811	$33,631	$34,472	$35,334	$36,217
	6-10	$33,611	$34,451	$35,313	$36,195	$37,100	$38,028
	11-15	$35,212	$36,092	$36,994	$37,919	$38,867	$39,839
	16-20	$36,812	$37,732	$38,676	$39,643	$40,634	$41,650
	21-25	$38,413	$39,373	$40,357	$41,366	$42,400	$43,460
	26-50	$40,013	$41,014	$42,039	$43,090	$44,167	$45,271
	51-75	$41,614	$42,654	$43,720	$44,813	$45,934	$47,082
	76-100	$43,214	$44,295	$45,402	$46,537	$47,700	$48,893
SWIFT	1-12		$37,574	$38,513	$39,476	$40,463	$41,475
	13-25		$41,749	$42,793	$43,862	$44,959	$46,083
	26-50		$54,274	$55,630	$57,021	$58,447	$59,908
	51-75		$57,405	$58,840	$60,311	$61,819	$63,364
	76-100		$59,284	$60,766	$62,285	$63,842	$65,438
	101-125		$61,371	$62,905	$64,478	$66,090	$67,742
	126-150		$62,623	$64,189	$65,794	$67,439	$69,125
	151-175		$64,711	$66,329	$67,987	$69,687	$71,429
	176-200		$67,633	$69,324	$71,057	$72,834	$74,655
Cert Tracker – State Users	1-5	$16,810	$17,230	$17,661	$18,103	$18,555	$19,019

Product	User Count Range	2021	2022	2023	2024	2025	2026
	6-10	$17,651	$18,092	$18,544	$19,008	$19,483	$19,970
	11-15	$18,491	$18,953	$19,427	$19,913	$20,411	$20,921
	16-20	$19,332	$19,815	$20,310	$20,818	$21,338	$21,872
	21-25	$20,172	$20,676	$21,193	$21,723	$22,266	$22,823
	26-50	$21,013	$21,538	$22,076	$22,628	$23,194	$23,774
	51-75	$21,853	$22,399	$22,959	$23,533	$24,122	$24,725
	76-100	$22,694	$23,261	$23,842	$24,438	$25,049	$25,676
Cert Tracker – Non State Users	1-500	$9,200	$9,430	$9,666	$9,907	$10,155	$10,409
	501-1000	$10,580	$10,845	$11,116	$11,394	$11,678	$11,970
	1001-1500	$11,040	$11,316	$11,599	$11,889	$12,186	$12,491
	1501-2000	$11,500	$11,788	$12,082	$12,384	$12,694	$13,011
	2001-2500	$11,960	$12,259	$12,565	$12,880	$13,202	$13,532
	2500-5000	$12,880	$13,202	$13,532	$13,870	$14,217	$14,573
	5001-7500	$13,800	$14,145	$14,499	$14,861	$15,233	$15,613
	75001-10000	$14,720	$15,088	$15,465	$15,852	$16,248	$16,654
	10001-15000	$15,640	$16,031	$16,432	$16,843	$17,264	$17,695
	15000+	$16,560	$16,974	$17,398	$17,833	$18,279	$18,736

A 5% discount is applied to the annual SaaS fees when more than one SaaS product is in use, including the pilot period.

Web Services Fees

Annual Web Services fees are based on the costs associated with the following table for the calendar year in which the start of the annual fee is incurred. Annual fees are invoiced the first month in which the annual cycle starts. Annual cycles less than a year in duration will be pro-rated (e.g. last cycle of contract period).

Item	2021	2022	2023	2024	2025
Web Services	$5,500	$5,638	$5,778	$5,923	$6,071

SDWIS Hosting Fees

Annual SDWIS hosting fees are based on the costs associated with the following table for the calendar year in which the start of the annual fee cycle is incurred. Annual costs are invoiced monthly for each month in the annual cycle. Annual cycles less than a year in duration will be pro-rated (e.g. last cycle of the contract period).

Item	2021	2022	2023	2024	2025	2026
Annual Total	**$92,643**	**$94,819**	**$97,061**	**$99,369**	**$101,747**	**$104,196**
Hosting, Storage and Licensing	$2,878	$2,964	$3,053	$3,144	$3,239	$3,336
On Demand SDWIS Support	$3,167	$3,262	$3,360	$3,460	$3,564	$3,671
Azure VPN Connectivity	$525	$525	$525	$525	$525	$525
Environment Maintenance	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
Monthly Amount	**$8,069**	**$8,251**	**$8,437**	**$8,630**	**$8,828**	**$9,032**

Environment Monthly Operations Hold Fees

In the event the State choses to implement the production SaaS product following the completion of the pilot, the State will be billed $1,400 per month per SaaS product to maintain the pilot environment for each month between the completion of the pilot and the start of the Annual SaaS fee for the first annual cycle for that product.

Labor Rates for Optional Future Services

In the event the parties decide to add services to the contract, Contractor will use the labor rates listed below for calculating the costs of future statements of work, which will then be added to the contract via a Contract Change Notice.

GEC Staff Description	Hourly Labor Rates				
	2021	2022	2023	2024	2025
Program Manager	$142.64	$146.92	$151.33	$155.87	$160.54
Senior Project Manager	$148.59	$153.05	$157.64	$162.37	$167.24
Developer 3	$118.85	$122.42	$126.09	$129.87	$133.77
Web Designer 2	$70.70	$72.82	$75.01	$77.26	$79.57
Subject Matter Expert 3	$128.09	$131.93	$135.89	$139.97	$144.17
Subject Matter Expert 2	$118.85	$122.42	$126.09	$129.87	$133.77
Analyst III	$98.32	$101.27	$104.31	$107.44	$110.66
Analyst II	$83.62	$86.13	$88.71	$91.37	$94.12
Analyst I	$58.88	$60.65	$62.47	$64.34	$66.27
Senior Data Specialist	$72.64	$74.82	$77.06	$79.38	$81.76

If Contractor reduces its prices for any of the software or services during the term of this Contract, the State shall have the immediate benefit of such lower prices for new purchases. Contractor shall send notice to the State's Contract Administrator with the reduced prices within fifteen (15) Business Days of the reduction taking effect.

Travel and Expenses
The State does not pay for overtime or travel expenses.

EXHIBIT 1 to Schedule A
BUSINESS SPECIFICATION WORKSHEET

Contractor shall meet the Business Specifications as detailed in the table below. The columns are defined as follows:

Column A: Business Specification number.
Column B: Business Specification description.
Column C: Indicates how system will comply with the Business Specification for Reporting – SWIMR.
Column D: Contractor's disclosure of how it will meet the requirements for Reporting – SWIMR.
Column E: Indicates how system will comply with the Business Specification for Sanitary Surveys - SWIFT.
Column F: Contractor's disclosure of how it will meet the requirements for Sanitary Surveys - SWIFT.
Column G: Indicates how system will comply with the Business Specification for Operator Training and Certification - Cert Tracker.
Column H: Contractor's disclosure of how it will meet the requirements for Operator Training and Certification - Cert Tracker.

Contractor shall indicate in Columns, C, E and G, the appropriate system description from the list below:

1) **Current Capability.** This capability is available in the system with no additional configuration or cost.
2) **Requires Configuration.** This capability will be met through Contractor-supported changes to existing settings and application options as part of the initial implementation at no additional cost (e.g., setting naming conventions, creating user-defined fields).
3) **Customization to Software.** The requirement will be met through Contractor modifying the underlying source code, which can be completed as part of the initial implementation.
4) **Future Enhancement.** This capability is a planned enhancement to the base software and will be available within the next 12 months at no additional cost.
5) **Not Available.** This capability is not currently available, and a future enhancement is not planned.

    NOTE: Configuration is referred to as a modification to the system that must be completed by the Contractor prior to Go-Live but allows an IT or non-IT end user to maintain or modify thereafter (i.e. no source code or structural data model changes occurring). Further, any configuration changes must be forward-compatible with future releases and be fully supported by the Contractor without additional costs.

Contractor shall describe in detail in Columns, D, F and H the manner in which Contractor will ensure the requirement is met for each respective module.

3	B	C	D	E	F	G	H
		Reporting - SWIMR	Reporting - SWIMR	Sanitary Surveys - SWIFT	Sanitary Surveys - SWIFT	Operator Training and Certification - Cert Tracker	Operator Training and Certification - Cert Tracker
Business Specification Number	**Business Specification** **NOTE - Some have been duplicated if the requirement can be met in phased functionality.**	**(1-5)**		**(1-5)**		**(1-5)**	
REQUIRED							
Global/General							
Data Sorting and Filtering							
4.0	The solution must support data sorting and filtering of data result sets.	1	All data grids can be sorted and filtered	1	All data grids can be sorted and filtered	1	All data grids can be sorted and filtered
Data Export							
5.0	The solution must support export of data result sets.	1	All data results can be exported to Excel or created as a report in Word or as a PDF	1	Metric data can be exported to various formats and the surveys can be generated	1	The reports can be exported as Excel sheets
5.1	The solution must support exporting of tabular and text-based data	1	All data results can be exported to Excel or created as a report in Word or as a PDF	1	All data results can be exported to Excel or created as a report in Word or as a PDF	1	All data results can be exported to Excel or created as a report in Word or as a PDF
5.1.1	The solution must provide context sensitive format options when the data being exported includes summary rows (i.e., sub totals and or totals).	5	We will be able to create these formatting options if they are needed. Currently the software does not require special formatting for exported data	5	We will be able to create these formatting options if they are needed. Currently the software does not require special formatting for exported data	5	We will be able to create these formatting options if they are needed. Currently the software does not require special formatting for exported data
5.2	The solution must support exporting GIS data that is compatible with ESRI software formats.	5	Customization could be done to provide data (e	5	Customization could be done to provide data (e exported	5	No GIS data are stored in Cert Tracker.

			exported as lat/long within an Excel or Word file).		as lat/long within an Excel or Word file).		
5.3	The solution must allow a user to define the location and file name of the exported data file (i.e., a dialogue box).	2	Exported data is automatically created using our naming systems and is placed in the user's Downloads folder	2	Exported data is automatically created using our naming systems and is placed in the user's Downloads folder	2	Exported data is automatically created using our naming systems and is placed in the user's Downloads folder
5.4	The solution must maintain the same header values and data values in the export file as are displayed (i.e., if the display is a concatenation or calculation, that same displayed value is to be represented in the data export).	1	The same data and headers are displayed in exports	1	The same data and headers are displayed in exports	1	The same data and headers are displayed in exports
Editing Tools							
6.0	The solution must systematically use editing tools, such as spell check and grammar check, for data entry text fields, to include notes, email content, notification/alert content, etc..	NA	NA	1	The software uses spell check for all data entry text fields	1	The software uses spell check for all data entry text fields
6.1	The solution must use an administratively managed system-wide dictionary (i.e., one dictionary maintained for all users/use).	NA	NA	5	There is no plan to allow administrators to maintain a dictionary	5	There is no plan to allow administrators to maintain a dictionary
6.1.1	The solution must allow a user to maintain a supplemental dictionary for their own use.	NA	NA	5	There is no plan to allow a user to maintain a dictionary	5	There is no plan to allow a user to maintain a dictionary
6.2	The solution must support real time identification of unrecognized spelling and grammar.	NA	NA	1	The software places a red underline below misspelled words	1	The software places a red underline below misspelled words
Notes							
7.0	The solution must allow notes entries for various activities and/or users in the system.	NA	NA	1	The software allows notes in multiple locations that can be edited by more than one person	1	The software allows notes that can be edited/seen by multiple people
7.1	The solution must maintain each entered note as a separate entry (versus one large data field).	NA	NA	5	The software maintains the notes as one larger data field. Time and Materials customization will be needed to add this capability.	5	The software maintains the notes as one larger data field. Time and Materials customization will be needed to add this capability.
7.2	The solution must systematically record the user and time/date the note was created and/or modified.	NA	NA	5	The user and time/date is not recorded. Time and Materials customization will be needed to add this capability.	5	The user and time/date is not recorded. Time and Materials customization will be needed to add this capability.
7.3	The solution must support a minimum notes field size of 1000 characters.	NA	NA	1	The software allows for notes up to 8000 characters	1	The software allows for notes up to 1024 characters

7.4	If a size limit is applicable, the solution must display in real time the used/remaining and total character count.	NA	NA	1	The character count is displayed	3	The character count could be added
7.5	The data entry field must allow equal to or less than character entry, than the associated data record.	NA	NA	1	Software allows for equal to or less than character entry and data is stored in the associated data record.	1	Software allows for equal to or less than character entry and data is stored in the associated data record.
Note Categories							
8.0	The solution must require a note category to be selected for each note (or provide a default value based on where the note is being added).	NA	NA	1	Notes are placed throughout the application that automatically assigns them a category	5	Time and Materials customization will be needed to add this capability.
8.1	The solution must allow the category values to be administratively maintained.	NA	NA	5	Categories currently are assigned throughout the solution. Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.
Notes Entry via Cut and Paste							
9.0	The solution must allow a user to complete data entry into the notes field via 'Cut and Paste'.	NA	NA	1	Cut and Paste is available	1	Cut and Paste is available
9.1	The solution must truncate the pasted content to accommodate character limits of the notes field.	NA	NA	1	The text field will only paste the comments up to the character limit	1	The text field will only paste the comments up to the character limit
9.1.1	The solution must display a user message when the pasted content is truncated.	NA	NA	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.
Help							
10.0	The solution must provide content sensitive help (i.e., available help functionality must result in initial information related to the current screen/data field).	1	There are help links placed throughout the application and these can be added/removed/edited by an admin at any time	1	There are help links placed throughout the application and these can be added/removed/edited by an admin at any time	1	There are help links placed throughout the application and these can be added/removed/edited by an admin at any time
10.1	The solution must allow the help content to be administratively maintained.	1	The help links can be administratively maintained	1	The help links can be administratively maintained	1	The help links can be administratively maintained
11.0	The solution must allow a user to search the help content.	5	The Knowledge Center contains a search feature on all help content. Within the application all help links are displayed pointing to the Knowledge Center or	5	The Knowledge Center contains a search feature on all help content. Within the application all help links are displayed pointing to the Knowledge Center or other	5	The Knowledge Center contains a search feature on all help content. Within the application all help links are displayed pointing to the Knowledge Center or other resources (e.g. State defined SOPs)..

			other resources (e.g. State defined SOPs).		resources (e.g. State defined SOPs).		

12.0	System help content must support:
	  a) Narrative text
	  b) Images
	  c) Tutorial videos
		1	The Knowledge Center supports these formats.	1	The Knowledge Center supports these formats.	1	The Knowledge Center supports these formats.

Electronic Signatures							
13.0	The solution must facilitate electronic signing of documents. (e.g., official correspondence, contracts, applications, etc.)	NA	NA	5	Electronic signing would require development. Time and Materials customization will be needed to add this capability.	1	The software allows for electronic signing and a checkbox to confirm that they have entered true information
Address Validation							
15.0	The solution must have the capability to verify mailing addresses.	NA	NA	1	Mailing addresses are pulled from the database that maintains the copy of record	5	Addresses can be pulled from the copy of record database but any hand entered addresses are not verified. Time and Materials customization will be needed to add this capability.
Document Repository							
16.0	The solution must store documents in the CM9 solution via integration.	2	Configuration will be required	2	Configuration will be required	2	Configuration will be required
16.1	The solution must create and maintain appropriate meta data attributes for content submitted to CM9 via the solution.	5	Population of appropriate meta data will occur with proposed integration services and associated costs.	5	Population of appropriate meta data will occur with proposed integration services and associated costs.	5	Population of appropriate meta data will occur with proposed integration services and associated costs.
Administration							
User Roles							
17.0	The solution must allow an authorized user administrator to create and manage user roles and system access (create, modify, delete, deactivate, etc.).	1	Administrators can manage all users within their agency in the Portal	1	Administrators can manage all users within their agency in the Portal	1	Administrators can manage all users within their agency in the Portal
304.0	The solution must allow an administrator to configure system access to limit a operator role to access information about themselves and the entities (e.g. water systems) they are associated with.	NA	NA	NA	NA	1	Administrators can configure access to information
305.0	The solution must allow an administrator to configure system access to allow program staff to access information about multiple entities (e.g. water systems) and multiple users (e.g. operators).	NA	NA	NA	NA	1	Administrators can configure access to information
User Activity Logs							

18.0	The solution must allow an authorized user administrator to review activity logs for users (e.g., last logged in, last update, etc.).	1	Administrators can review activity logs in the Portal	1	Administrators can review activity logs in the Portal	1	Administrators can review activity logs in the Portal
User Management							
19.0	The solution must allow an authorized user administrator to associate users with geographic locations for use in workflow queue assignment and/or system notifications.	5	Users are assigned to specific Domains that allow them access to reports. Time and Materials customization will be needed to add this geographic location capability.	1	Administrators can assign users to water system groups or regulating agencies (can be set up as geographic locations)	5	User permissions are based on roles. Time and Materials customization will be needed to add this geographic location capability.
Web Content Management							
20.0	The solution must allow an authorized web administrator to maintain web content available to non-credentialed public users (public portal content).	5	There is no public portal content other than the new user registration page. Time and Materials customization will be needed to add this capability.	5	There is no public portal content other than the new user registration page. Time and Materials customization will be needed to add this capability.	5	There is no public portal content other than the new user registration page. Time and Materials customization will be needed to add this capability.
Audit Logs							
21.0	The solution must maintain audit logs.	5	Audit information is maintained in the database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.	5	Audit information is maintained in the database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.	5	Audit information is maintained in the database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.
21.1	Audit logs must include: a) Password changes b) Data changes	5	Audit information is maintained in the database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.	5	Audit information is maintained in the database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.	5	Audit information is maintained in the database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.
21.2	The solution must allow an auditor to view and search the audit logs (via system functionality).	5	Audit information is maintained in the	5	Audit information is maintained in the database	5	Audit information is maintained in the database and would need

				database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.		and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.		development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.
21.3	The solution must maintain the following change details: 　a) User that made the change 　b) Date/time of change 　c) Previous data value 　d) Updated data value		5	Audit information is maintained in the database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.	5	Audit information is maintained in the database and some updated dates are displayed currently. Would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.	5	Audit information is maintained in the database and would need development to be displayed in the UI or a report. Time and Materials customization will be needed to add this capability.
Technical Requirements								
Data Access								
331.0	The solution must support secure access to the native data source for ODBC and read only access from other systems.		5	SWIMR does not permit use of ODBC connections: it uses REST APIs. GEC's SWIMR Buddy (provided at no cost with purchase of SWIMR) is an MS Access product that retrieves data using REST APIs. It can connect to other databases using an ODBC connections.	5	This product does not permit use of ODBC connections: GEC will provide web services for access to the data using the SWIMR Buddy tool.	5	This product does not permit use of ODBC connections: GEC will provide web services for access to the data using the SWIMR Buddy tool.
Geospatial Address Data								
22.0	The solution must use geospatial-based data associated with addresses and locations.		NA	NA	1	This is currently used for facilities	5	Time and Materials customization will be needed to add this capability.
Responsive Design								
23.0	The solution must be a responsive design.		1	The application is responsive to all device sizes and is always being tested and improved	1	The application is responsive to all device sizes and is always being tested and improved	1	The application is responsive to all device sizes and is always being tested and improved
Credit Card Processing								

24.0	The solution must integrate with CEPAS/Pay Place for a seamless in-application online credit card payment processing (i.e., a user does not need to print and provide separate proof of completion of online payment).	NA	NA	NA	NA	4	There is a plan to allow for online payment services. If Cert Tracker can connect to CEPAS/Pay Place using REST APIs, this feature will be available.
File Upload Format							
25.0	The solution must support the following digital content formats for uploaded files: a) *.pdf b) *.doc, *.docx c) *.jpeg, *.jpg d) *.gif e) *.png f) GIS formats (bidder to specify supported formats) g) CAD file formats (bidder to specify supported formats) h) *.xls, *.xlsx i) *.csv j) *.txt	NA	NA	1	All but GIS and CAD file formats are supported	1	All but GIS and CAD file formats are supported
26.0	Bidder to specify the file size their solution will support for uploaded files.	NA	NA	NA	NA	1	The upload size is set to 20mb
Digital Content Metadata							
27.0	The solution must maintain metadata associated with uploaded digital content e.g., the GPS coordinates, time/date stamp information associated with photos, etc.).	NA	NA	5	Time/date information is available but not GPS coordinates. That would require development	5	Development required
Session Recovery							
28.0	The solution must save transactional/temporary data values for session recovery purposes.	1 and 5	Some events during a session are saved automatically. Other session activity requires clicking a save button. Some data would be difficult to save automatically, as multiple validations must be done and data entry completed to have valid information for that evaluation.	1 and 5	Some events during a session are saved automatically. Other session activity requires clicking a save button. Some data would be difficult to save automatically, as multiple validations must be done and data entry completed to have valid information for that evaluation.	1 and 5	Some events during a session are saved automatically. Other session activity requires clicking a save button. Some data would be difficult to save automatically, as multiple validations must be done and data entry completed to have valid information for that evaluation.
Configurable Data Entry Fields							

29.0	The solution must allow an administrative user to configure custom text and numeric fields associated with entities (e.g. application, surveys, etc.).	NA	NA	1	Custom text can be created to be used with surveys	5	Time and Materials customization will be needed to add this capability.
30.0	The solution must provide the capability to configure business rules to perform calculations, test thresholds, and apply logic.	NA	NA	1	Business rules can be configured by administrators	1	Business rules can be configured by administrators
30.1	The solution must provide the capability to trigger business rule calculations upon creation or modification of an entity, or explicitly via a workflow action.	NA	NA	1	The application follows the set business rules and triggers actions/permissions	1	The application follows the set business rules and triggers actions/permissions
30.2	The solution must provide the capability to trigger actions such as workflows and notifications based on the result of business rule process. (For example, manual entry of numeric value in a custom field for an application under review may trigger a workflow based on configured thresholds.)	NA	NA	1	The application follows the set business rules and triggers actions/permissions	1	The application follows the set business rules and triggers actions/permissions
Data Exchange							
Unique Identifier							
301.0	The solution must consume the unique ID for a regulated entity from SDWIS and manage data to support SDWIS being the system of records for regulated entity IDs.	NA	NA	1	The software interacts with SDWIS via web services to use unique IDs	NA	NA
330.0	The solution must support consuming the unique ID for a public water supply from SDWIS to associate with public water operators.	NA	NA	1	The software interacts with SDWIS via web services to use unique IDs to associate users	NA	NA
31.0	The solution must maintain a unique identifier for regulated entities (e.g., public water supply, certified water operator, etc.)	NA	NA	NA	NA	1	All PWS and operators have a unique identifier
Public Portal							
32.0	The solution must systematically publish data on a public portal available to non-authenticated users.	NA	NA	NA	NA	5	The system does not publish data to a public portal. Time and Materials customization will be needed to add this capability.
32.1	Public reporting must include: a) Updates to lists (e.g., updating list of certified water operators when a license is issued). b) Updates to graphical publications (e.g., when counts or values change that are represented in published graphs)	NA	NA	NA	NA	5	The system does not publish data to a public portal. Time and Materials customization will be needed to add this capability.
32.2	The solution must allow an administrator to configure the frequency and trigger of automatic publishing of data and reports.	NA	NA	NA	NA	5	The system does not publish data to a public portal. Time and Materials customization will be needed to add this capability.
Contact Management							

Contact Information							
300.0	The solution must consume contact information from SDWIS and manage data to support SDWIS being the system of record for contact information.	NA	NA	1	The software interacts with SDWIS via web services to gather contact information	NA	NA
306.0	The solution must consume the COI information from SDWIS for a water system and assign the COI role to that user.	1	SWIMR can use any SDWIS POC type	1	SWIFT can use any SDWIS POC type	1	Cert Tracker can use any SDWIS POC type
33.0	The solution must allow an authorized program administrator to maintain contact information for program participants.	NA	NA	NA	NA	1	Admins have the ability to maintain contact information
33.1	Available contact information fields must include: a) Salutation b) Name c) Contact Type d) Company (if applicable) e) Role (if contact type is a person) f) Title (if contact type is a person) g) Address h) Phone (i.e., mobile, home, business) i) Fax j) Email	NA	NA	NA	NA	1 and 5	Contact fields are available – except for Role. Time and Materials customization will be needed to add this capability.
309.0	The solution must allow a program administrator to indicate when the value of a contact address or contact email address is invalid (e.g. record when mailed letter or email message came back as undeliverable).	NA	NA	NA	NA	1	Able to indicate that the address or email (or other info) is invalid
310.0	The solution must allow a program administrator to identify workflow triggers related to contact management (e.g., initiate notification if a user changes their email, initiate notifications if an address is flagged as undeliverable, etc.).	NA	NA	NA	NA	1	All profile updates must be approved by an administrator before they are changed. Emails will be sent when the request is made
33.1.1	The solution must allow a system administrator to identify required values based on contact type (i.e., if the contact type is a facility, the contact role value may not be required).	NA	NA	NA	NA	5	Required fields are specified by solution. Time and Materials customization will be needed to add this capability.
33.1.2	The solution must allow a system administrator to maintain the contact roles and contact types.	NA	NA	NA	NA	5	Required fields are specified by solution. Time and Materials customization will be needed to add this capability
Contact Information Relationships/Hierarchy							

34.0	The solution must allow the contact to have separate title, address, phone, fax, and email information for each contact role/type they are associated with (i.e., John Smith uses one address for his engineer role and a second address for his inspector role).	NA	NA	NA	NA	1	Users can have different contact information based on contact type but it does not show Role
34.1	The solution must maintain contact information associated with a company (i.e., if John Smith is associated with Smith Brothers Company as an engineer, Smith Brothers Company should be its own company type contact).	NA	NA	NA	NA	1	Multiple contact types are available
303.0	The solution must allow a certified water operator to be associated with more than one water supply.	NA	NA	NA	NA	1	Operators can be associated to more than one PWS
County Association							
311.0	The solution must be able to systematically consume the district association with the county associated with the contact address.	NA	NA	NA	NA	1	Information from SDWIS will be consumed when the connection is made to a water system
35.0	The solution must be able to systematically identify the county based on the provided address information.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Historical Information							
36.0	The solution must maintain historical contact information associated with changes/updates to contacts name (i.e., maintain "also known as" historical information).	NA	NA	NA	NA	5	Contact changes are overwritten in the UI. Time and Materials customization will be needed to add this capability. This would result in higher storage and bandwidth costs
36.1	The solution must return "also known as" matches in related searches/queries.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability. This would result in higher storage and bandwidth costs
37.0	The solution must maintain historical associations between names, roles, and contact types.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability. This would result in higher storage and bandwidth costs
Status							
38.0	The solution must allow a program administrator to initiate workflow to change the status of a contact to inactive (i.e., validate the status change will not impact other programs).	NA	NA	NA	NA	1	This is available at any time
Duplicate Contacts							

39.0	The solution must have functionality to prevent duplicate contacts (i.e., look up of existing contacts before completing the creation of a new contact).			NA	NA	1	Users are able to have the same name but the email address will indicate that a user already has an account
		NA	NA				

Maintenance

40.0	The solution must allow a user to maintain their contact information.	NA	NA	NA	NA	1	Users can maintain their contact info.. Changes take immediate effect. There is an option for the administrator to check an approved box that is an indicator that the change has been reviewed. This is an optional step and does not impact the changes being effective.
40.1	The solution must allow a configuration manager to identify which contact information can be maintained by the user.	NA	NA	NA	NA	5	The solution does not allow a configuration manager to change which contact information can be managed by the user. Time and Materials customization will be needed to add this capability.
40.2	The solution must allow a configuration manager to identify when and who is notified when a user changes their contact information.	NA	NA	NA	NA	1 and 5	The administrators and state users will be notified of contact changes. Development is needed to choose who receives the emails. Time and Materials customization will be needed to add this capability.
312.0	The solution must allow for roles that include rights to maintain contact information for other users via proxy.	NA	NA	NA	NA	1	Proxy is a role in the Portal and that user will be able to maintain contact info for others (if permission is given)
313.0	The solution must allow a user to manage proxy settings for maintenance of their contact information.	NA	NA	NA	NA	1 and 5	Proxies have the ability to update all information. Development is required to set the permissions in the UI. Time and Materials customization will be needed to add this capability.

Communications/Messages/Alerts

Format

41.0	The solution must support use of formatted content for messages and notifications/alerts.	NA	NA	1	All notifications/alerts are sent via email and the	1	All notifications/alerts are sent via email

					format/content can be edited by the admins		
Program Participant Notifications and Alerts							
42.0	The solution must allow an authorized program/system administrator to create and manage program participant notifications and alerts.	NA	NA	1	Admins can set all notifications and alerts for each user	1	Admins can set all notifications and alerts for each user
42.1	Notification and alert administration must include: a) Recipient(s) b) Method(s) of delivery c) Frequency/Duration (single delivery at one date/time, for posted between a start and end date/time) d) Acknowledgement details (for in system alerts/notification, does it require the user to acknowledge the alert?) e) Content	NA	NA	1 and 5	All are available except for Acknowledgement and method of delivery. Time and Materials customization will be needed to add the missing capability.	1 and 5	Admins can set recipient and frequency/duration. Time and Materials customization will be needed to add the missing capability.
Document Repository							
43.0	The solution must maintain system generated communications - Internal to the solution	NA	NA	1	Admins can create internal communications via the Portal and Blog page	1	Admins can create internal communications via the Portal
43.0	The solution must maintain system generated communications - Integration with EDM solution (CM9)	NA	NA	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.
Message Notification							
44.0	The solution must allow a user to identify one or more methods to receive **message notifications** (i.e., notification of a message consisting of text).	NA	NA	1	Email and blog posts are the methods currently available	1 and 5	Email is the only method currently available. Time and Materials customization will be needed to add the missing capability.
44.1	Supported methods must include: a) Mobile phone number for text messages (SMS) b) Valid email address for email content c) Dashboard	NA	NA	1 and 5	Email and Dashboard messages are available. Time and Materials customization will be needed to add the missing capability.	1 and 5	Email messages are available. Time and Materials customization will be needed to add the missing capability.
Document Notification							
45.0	The solution must allow a user to identify one or more methods to receive **document notifications** (i.e., notification that contains a document).	NA	NA	1	Email and Portal notifications	1	Email and Portal notifications

#	Requirement						

45.1	Supported methods must include:
	  a) Digital file delivered via email
	  b) Printed material delivered via Mail Carrier
	  c) Message notification to include URL to access the digital file in the system (i.e., via a user portal, etc.)
	  d) Dashboard link
		NA	NA	1	All methods are available	1	All methods are available

Dashboards							
Dashboard							
46.0	The solution must present a summary of notifications, actions, and activity that is specific to authenticated users (i.e., dashboard type presentation).	NA	NA	1	SWIFT contains a dashboard with metrics, calendar events (which can be summarized over a period of time), and blog post.	1	Cert Tracker's dashboard indicates number of new operator applications, renewals, and upgrades based on user authentication.
Content Administration							
47.0	The solution must allow a dashboard administrator to configure the dashboard content for all users (one format/layout for all).	NA	NA	1	Admins can set the default view	5	Time and Materials customization will be needed to add this capability.
47.0	The solution must allow a dashboard administrator to configure the dashboard content by user role.	NA	NA	5	Defaults are set by agency (all users). Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.

47.1	Content must include, at a minimum:
	  a) Workflow metrics
	  b) Work assignments/Tasks
	  c) Metrics
	  d) Notifications/Alerts
	  e) Calendar
		NA	NA	1	All are included	5	Metrics and tasks are available. Time and Materials customization will be needed to add the missing capability.

User Settings							
48.0	The solution must allow a user to customize their dashboard according to their role (e.g., add optional items, move items not required to be in a static location, etc.).	NA	NA	5	All items are currently static. Time and Materials customization will be needed to add this capability.	1	Metrics can be customized
48.1	The solution must include a "reset" option to return a user-customized dashboard to the default settings.	NA	NA	5	All items are currently static. Time and Materials customization will be needed to add this capability.	1 and 5	Clearing Cookies will reset the metric defaults. Time and Materials customization will be needed to add this capability.
Navigation							
49.0	The solution must allow the user to navigate to more details about a dashboard item (navigationally interactive).	NA	NA	1	Information and metrics can be expanded	5	Development would be needed to show greater detail of dashboard

							items but some items can be expanded for more information. Time and Materials customization will be needed to add this capability.
Financial							
Fee Schedules							
50.0	The solution must support a configurable fee schedule for each application type/activity (e.g. Applications, Renewals, Late fees, Inspection fees, Document replacement fees, Annual operation fees, Fines, etc.)	NA	NA	NA	NA	1 and5	Basic fee information is available. Development would be needed for more (late fees, inspection fees, etc.) Time and Materials customization will be needed to add this capability.
50.1	The solution must allow maintenance of the fee schedule by an administrator.	NA	NA	NA	NA	1	Fees can be maintained by admins
Payment Tracking							
314.0	The solution must support the ability to print a receipt for a confirmed payment.	NA	NA	NA	NA	5	GEC will customize Cert Tracker to support this feature as part of the MiCaRS integration services.
Workflow							
Business Process Automation							
56.0	The solution must automate business processes supporting the execution of sanitary surveys.	NA	NA	1	Business process are automated	NA	NA
56.0	The solution must automate business processes supporting operator training certification.	NA	NA	NA	NA	1	Business process are automated
Go-Live							
57.0	The solution must support up to 20 workflows with the initial implementation.	NA	NA	1	Workflow can be set up however it is desired and changed at any time, if needed	1	Workflow can be set up however it is desired and changed at any time, if needed
Configuration							
58.0	The solution must allow an authorized workflow configuration administrator to define workflows for various program areas and business processes.	NA	NA	1	Workflow can be set up however it is desired and changed at any time, if needed	1	Workflow can be set up however it is desired and changed at any time, if needed

58.1	Workflow configuration items must include: a) Trigger(s) b) Initiation of one or more sub workflows c) Task assignment (individual and work group) d) Task assignment logic e) Assignment transfer (manual according to roles and systematic) f) Escalation g) Notifications h) Reminders/Alerts i) Task completion criteria j) Workflow completion criteria k) Workflow exit criteria l) Recommendation m) Approval (single, tiered with rework, tiered without rework) n) Electronic signatures o) Timers	NA	NA	5	Not all items are available in the current state. Time and Materials customization will be needed to add the missing capability.	5	Not all items are available in the current state. Time and Materials customization will be needed to add the missing capability.
Task Assignment							
59.0	Task assignment must include: a) Location of project (e.g. inspections are often assigned based on the county the project is located in) b) Data values associated with the facility (inspections are often assigned based on the engineer associated with the district the facility is located in, or the specific ID of the facility)	NA	NA	1	Locations are available	NA	NA
59.0	Task assignment must include data values associated with the applicant/operator	NA	NA	NA	NA	1	Data values are associated
Administration							
60.0	The system must allow for a separate workflow configuration administrator for each workflow (i.e., a single person may have that role for a single workflow, or for multiple workflows).	NA	NA	1	Workflows are dynamic and can be changed at any time	1	Workflows are dynamic and can be changed at any time
Metrics							
61.0	The solution must allow a program administrator to view workflow metrics.	NA	NA	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.

61.1	Workflow metrics must include: a) Workflow durations b) Activity metrics (e.g. duration of time to complete an activity, number of resources assigned, measurement against timers, reassignment, escalations, etc.) c) Work queues (e.g., work assignments by resource and their status, assignment/aged information)	NA	NA	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.

Canned Report Administration							
62.0	The solution must allow a report administrator to maintain canned reports.	1	Reports and any templates are designed jointly by the state and GEC but must be maintained by GEC as they are developed with highly complex code. Email templates are controlled by the state solution admin.	1	The state solution admin has control and can maintain all reports. The state admins can edit/update their templates, including for emails.	1	The state solution admin has control and can maintain the certificate. Reports are designed jointly by the state and GEC but must be maintained by GEC as they are developed with highly complex code. The state admins can edit/update their templates, including for emails.
62.1	Canned report functionality must include: a) Filters b) Sort order	1	All reports can be filtered and sorted	1	All reports can be filtered and sorted	1	All reports can be filtered and sorted
63.0	The solution must allow a report administrator to define the user roles that will have access to canned reports.	1	Admins can setup who has access to which reports	1	Admins can setup who has access to which reports	1 and 5	Reports are only available to state users and admins but all users with those roles can see reports. Time and Materials customization will be needed to add the missing capability.
Go-Live							
64.0	The solution must support up to 50 canned reports and templates with the initial implementation.	NA	NA	1	As many reports/templates as needed can be stored	1	There are only a couple reports currently but more can/will be developed. They can all be stored
Template Administration							
65.0	The solution must allow a template administrator to define the user roles that will have access to use and maintain templates.	5	The state solution admin can assign user rules that will have access to each template. As explained in the response to requirement 62, reports must be	3	The state solution admin can assign user rules that will have access to each template. The state solution admin has control and can maintain all reports and templates. Email templates	5	The state solution admin can assign user rules that will have access to each template. The state solution admin has control and can maintain the certificate. As explained in the response to requirement 62, reports must be

			maintained by GEC as they are developed with highly complex code. Email templates are controlled by the state solution admin.		are controlled by the state solution admin		maintained by GEC as they are developed with highly complex code. Templates, including the printable certificates and emails, are controlled by the state solution admin.
Metrics							
66.0	The solution must allow a report/template administrator to view metrics related to reports/templates.	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.

66.1	Metrics must include:
	  a) Last used date
	  b) Count of usage over a defined time period
	  c) Count of usage by users over a defined time period
		5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.

Status							
67.0	The solution must allow a report/template administrator to maintain the status of a report/template.	1	Admins can set the reports status	1	Admins can set the reports status	1 and 3	GEC maintains the reports, but certificates are managed by the admin.

67.1	Statuses must include:
	  a) Active
	  b) Inactive
	  c) Under review
		5	Active and Inactive are currently available	5	Active and Inactive are currently available	5	All reports displayed are active

67.1.1	The solution must limit use of the report or template based on the status.	1	Report will not be available if the status is not "active"	1	Report will not be available if the status is not "active"	1	Report will not be available if the status is not "active"
Versioning							
68.0	The solution must maintain versioning for reports and templates.	5	Historical versions are not stored. Time and Materials customization will be needed to add this capability.	5	Updated date and user are displayed but historical versions are not stored. Time and Materials customization will be needed to add this capability.	5	Historical versions are not stored. Time and Materials customization will be needed to add this capability.

68.1	Versioning must include:
	  a) Time/date of change
	  b) User completing the change
	  c) Optional comments describing the change
	  d) Draft and Final states
		5	Historical versions are not stored. Time and Materials customization will be needed to add this capability.	5	Time/Date and User updated are the currently displayed fields. Time and Materials customization will be needed to add this capability.	5	Historical versions are not stored. Time and Materials customization will be needed to add this capability.

Modification							

69.0	The solution must allow a form administrator to identify content on templates that can be modified (i.e., some content will be locked down, while other content, based on roles, can be modified).	5	GEC maintains templates. Time and Materials customization will be needed to add this capability.	1	Admins can modify all report content	1 and 5	The admin can assign the certificate(s) to the appropriate certification level. GEC maintains other reporting templates. Time and Materials customization will be needed to add this capability.
Online Forms (for data entry)							
Functionality							
70.0	The solution must allow a program administrator to define and maintain the online forms applicable to their program area.	NA	NA	1	Admins can maintain online forms	1	Admins can maintain online forms

70.1	Online forms must include:
	  a) Sanitary Survey forms
	  b) Level 1 Assessment
	  c) Level 2 Assessment
	  d) Treatment Surveillance
		NA	NA	1	Online forms include all site visit reasons, including items A, B, C and D. .	NA	NA

70.1	Online forms must include:
	  a) Exam Application
	  b) Renewal Application
	  c) Course Approval Applications
	  d) Course Renewal Applications
	  e) Reciprocity Application
	  f) Continuing Credits
		NA	NA	NA	NA	1	Online forms include all operator certification information to support items A, B, E and F. Course approval and renewal applications are not handled through online forms. When these requests are sent to SOM, they must be uploaded into Cert Tracker by the admin through either an individual or batch upload process.

70.2	The solution must support form design features that allow for an interview type user experience when filling out the form (i.e., based on user responses, additional fields, drop down values, and data entry logic will vary).	NA	NA	1	Agency can set up the design features anyway they want with the question sets	1	Features and design have been set up to use logic based on information and data entered. Admins create that needed logic

71.0	Online form data entry logic must support:
	  a) USPS address format standards
	  b) EGLE Correspondence Guidelines (provided with the RFP as part of the informational material)
		NA	NA	1	GEC products follow USPS logic.	1	GEC products follow USPS logic.

Access/Use							
72.0	The solution must allow a program administrator to enter and maintain entity data outside of a workflow process.	NA	NA	1	Admin can maintain entity data at any time	1	Admin can maintain entity data at any time
Field Use							

#	Requirement						

73.0	The solution must support design features for ease of use while in the field to include:
	  a) Shortcut keys customizable by user
	  b) Favorites" for values and data sets
	  c) Autofill for data entry fields
		NA	NA	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.

Application Submission (Certification)							
Eligibility							
74.0	The solution must allow an eligible applicant to submit a completed application online.	NA	NA	NA	NA	1	Applicants can submit applications
74.1	The solution must allow an authorized configuration manager to define the criteria of an eligible applicant by application type (e.g., enforcement activities may result in an applicant being ineligible to apply, current certification status, etc.).	NA	NA	NA	NA	1	Admins/state users review all applicants
Upload Supporting Documents							
75.0	The solution must allow an applicant to upload supporting documents for an open application.	NA	NA	NA	NA	1	Attachments are not available until the applicant is approved and is an application user
75.1	The solution must support multiple supporting documents for a single application.	NA	NA	NA	NA	1	Attachments are not available until the applicant is approved and is an application user
Mail Supporting Documents							
76.0	The solution must allow an applicant to print a cover sheet for their online application to include when mailing supplemental documents to the EGLE for their application (i.e., filling out the application online, but sending a set of plans in the mail).	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Work in Progress							
77.0	The solution must maintain the work in progress application (i.e., able to save and come back to complete and submit in a later session).	NA	NA	NA	NA	1	Able to save and come back at any point and as many times as needed

77.1	Minimum inputs to maintain a work in progress application must include:
	  a) Applicant first name
	  b) Applicant last name
	  c) Applicant email address
		NA	NA	NA	NA	1	All fields are available but email is not required (in case an operator does not have an email)

77.2	The solution must delete a work in progress application that has not been submitted for an administratively configurable number of days.	NA	NA	NA	NA	5	The software does not automatically delete applications that have not been submitted because state staff will see the application until the applicant clicks "submit". The configurable

	number of days is a Time and Materials customization that will be needed to add this capability.						
77.2.1	The solution must notify the applicant an administratively configurable number of days prior to deleting the work in progress application (i.e., remind the applicant to submit their application before it is deleted).	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
77.2.2	The solution must allow an authorized system configuration administrator to set the number of calendar days an unsubmitted online work in progress application is maintained before the solution deletes the application.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
77.2.2.1	The solution must support a separate configurable duration for each application type.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
77.2.3	The solution must allow an authorized system configuration administrator to set the number of calendar days before the deletion date provide the applicant a reminder notification.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
77.2.3.1	The solution must support a separate configurable duration for each application type.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Fee Calculation							
78.0	The solution must calculate the appropriate fee(s) for the completed online application.	NA	NA	NA	NA	1	The fees are set by the admin and the system takes them into account for certification applications
78.1	Appropriate fee calculation must include: a) Initial application fees b) Renewal application fees c) Late fees d) Consideration for re-submission e) Consideration for application type/scope	NA	NA	NA	NA	5	Fees are set by the admin but the software does not currently use other fees (late, re-submission, etc.). Time and Materials customization will be needed to add the missing capability.
Payment Voucher							
79.0	The solution must allow an applicant to print a payment voucher for their online application to support mailing a check to EGLE for their application fee(s).	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
79.1	The solution must allow this functionality to be administratively configured for each application type (i.e., not all application types will support a payment by check if the application is being submitted on line).	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.

ID	Requirement						Comments
316.0	The solution must allow an applicant to print a payment voucher for their online application to support a 3rd party submitting payment on their behalf (either by check or via online payment).	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
316.1	The solution must allow this functionality to be administratively configured for each application type.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Pre-Populating Renewal Data							
80.0	The solution must allow for carry forward of application information between the previous application and the associated renewal application (i.e. pre-populate data based on the initial application, or previous renewal application).	NA	NA	NA	NA	1	This is currently available.
80.1	The solution must allow an authorized system configuration administrator to identify content that cannot be modified during the renewal process for each application type (i.e., some content can only be changed via a change process and associated fees).	NA	NA	NA	NA	1	CT admin will have authority to designate what CEU information cannot be modified by operator in pre-populated fields during renewal process. (Admin has authority to include defaulted values of CEUs for a course and the operator cannot include higher values.) Note: operator also cannot adjust fees – this is pre-set in the software by the admin.
Printing Pre-Populated Renewal Application							
81.0	The solution must allow a pre-populated renewal application to be printed.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
81.1	The solution must allow a user administrator to associate this functionality with specific roles and application types.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Continuing Education Credits							
82.0	The solution must validate the provision/completion of associated continuing education credits for the specific application.	NA	NA	NA	NA	1	CECs are validated for applications
82.1	The solution must allow the continuing credit criteria used for validation to be administratively configured.	NA	NA	NA	NA	1	This is configured by the admins
ID							
83.0	The solution must maintain a unique number for each submitted application.	NA	NA	NA	NA	1	Submitted applications have unique numbers
Multiple Applications							
84.0	The solution must allow an applicant to have more than one active application in process at the same time.	NA	NA	NA	NA	1	The applicant can have more than one application in process as long

							as it is not for the same certifications
Printing Blank Applications							
85.0	The solution must allow an applicant to print a blank copy of the application to be filled out by hand.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Form Accessibility							
86.0	The solution must enable systematically publishing of the printable form to a public facing web site for access by a public citizen.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
86.1	The solution must maintain synchronization of content between the online form and the printable form.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Online Payment of Fees							
87.0	The solution must allow an applicant to pay their application fee(s) online, for online applications.	NA	NA	NA	NA	4	There is a plan to develop this functionality using integration with CEPAS to hold the PCI.
87.0	The solution must allow an applicant to pay their application fee(s) online, regardless of method of application.	NA	NA	NA	NA	4	There is a plan to develop this functionality sing integration with CEPAS to hold the PCI.
87.1	The solution must identify and provide confirmation of online payment associated with paper submitted application.	NA	NA	NA	NA	4	There is a plan to develop this functionality using integration with CEPAS to hold the PCI.
87.2	The solution must allow this functionality to be administratively configured for each application type (i.e., not all application types will support an online payment if the application is being submitted on paper).	NA	NA	NA	NA	4	There is a plan to develop this functionality using integration with CEPAS to hold the PCI.
Pre-Submission Validation							
88.0	The solution must complete data validations to confirm required fields are completed prior to allowing submission of the application.	NA	NA	NA	NA	1	Validations are in place for required fields
89.0	If applicable, the solution must confirm successful payment of associated fees prior to allowing submission of the application.	NA	NA	NA	NA	1	Validations are in place for fees
89.1	The solution must account for use of payment voucher when evaluating successful payment of associated fees (i.e., using a payment voucher to send payment in when completing the application online).	NA	NA	NA	NA	4	There is a plan to develop this functionality using integration with CEPAS to hold the PCI.
Workflow Initiation							
90.0	The solution must initiate a workflow when an online application is submitted.	NA	NA	NA	NA	1	Workflows are created

Payment Tracking							
91.0	The solution must track when a check payment is processed by ASC for an application (notification to the solution to be supported by MiCaRS integration).	NA	NA	NA	NA	4	There is a plan to develop this functionality using a third party vendor to hold the PCI.
92.0	The solution must track when a credit card payment is processed for an application (notification to the solution to be supported by MiCaRS integration).	NA	NA	NA	NA	4	There is a plan to develop this functionality using a third party vendor to hold the PCI.
Application Corrections							
93.0	The solution must allow an applicant to update a re-opened online application after it has been submitted (for updates to resolve open or incomplete items).	NA	NA	NA	NA	1	Admin can request more information and send the application back to the operator
Application Withdrawals							
94.0	The solution must allow an applicant to request to withdrawal their online application.	NA	NA	NA	NA	1	The application can be cancelled before hitting the "submit" button.
94.1	The solution must prevent an applicant from withdrawing their online application based on the status of the application (i.e., after a certain point in the workflow, the application cannot be withdrawn).	NA	NA	NA	NA	1	After clicking "submit" the state staff can review the application.
94.2	The solution must notify the program administrator when an application has been withdrawn for their program.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
94.3	The solution must allow the ability to withdrawal an application to be administratively configured by program.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Applicant Catalog/Listing							
95.0	The solution must allow a program manager to identify if a program maintains an optional public published catalog of applicants (i.e., it is optional for the applicant to be included in the published catalog).	NA	NA	NA	NA	5	The application is not currently publishing to any public sites. Time and Materials customization will be needed to add this capability.
95.1	The solution must allow an applicant to indicate if they will be included in the optional published catalog.	NA	NA	NA	NA	5	The application is not currently publishing to any public sites. Time and Materials customization will be needed to add this capability.
Application Processing (Permit, License, Certification)							
Paper Application Tracking							
99.0	The solution must allow a program administrator to record when a paper application is received.	NA	NA	NA	NA	1	Ad admin or state user can fill out the online application for the operator

Configure Administratively Complete							
100.0	The solution must allow an authorized system administrator to configure administratively complete criteria for an application type.	NA	NA	NA	NA	1	Admins set all criteria for applications

100.1	Administratively complete criteria must include:
	   a) Required information provided
	   b) Accurate information provided
	   c) Fees paid in full, where applicable
		NA	NA	NA	NA	1	Criteria are available

Approval Criteria							
101.0	The solution must allow an authorized system administrator to configure approval criteria for an application type (i.e., criteria that would allow the solution to systematically approve the application without staff review).	NA	NA	NA	NA	1	The automatic approval rate can be set and changed by admins

101.1	Approval criteria must include:
	   a) Existing certification status (to include time lapsed from expired certifications)
	   b) CEC/CSC records
		NA	NA	NA	NA	1	Approvals look for completion of all requirements before approving

101.2	The solution must allow an authorized system administrator to configure by application type the ability for the solution to systematically determine an application outcome based on the approval criteria.	NA	NA	NA	NA	1	The admin creates the career path that establishes the criteria needed to approve the certification.
Audit System Approvals							
102.0	The solution must allow a program administrator to perform a quality check/audit on the applications where outcomes were systematically determined.	NA	NA	NA	NA	1	Admins can audit automatic approvals
315.0	The solution must allow a program administrator to set the sampling value by program/license/cert type (e.g. 100% of all activities are subject to audit and approval, 20% of all activities are subject to audit and approval, etc.).	NA	NA	NA	NA	1	Admins set the auditing percentage for renewals. Initial and upgrades require staff review.
Application Review							
103.0	The solution must allow a program administrator to review related system information as part of their application processing.	NA	NA	NA	NA	1	Admins can view related information

103.1	Related system information must include:
	   a) Related applications
	   b) Related compliance activities
	   c) Related enforcement activities
	   d) Geospatial analysis of related events/activities
	   e) Monitoring and reporting data (where applicable)
		NA	NA	NA	NA	1 and 5	Not all features are available. Time and Materials customization will be needed to add the missing capability.

Record Deficiencies							

104.0	The solution must allow a program administrator to record when additional information is received from an applicant for their application (i.e., additional materials or updates received outside of the system related to being administratively incomplete, etc.).	NA	NA	NA	NA	1	Admins can record this information in the notes
Administratively Complete							
105.0	The solution must allow a program administrator to record if a received application, or updates to a previously received application are administratively complete.	NA	NA	NA	NA	1	Admins can record when an application is complete
105.1	The solution must evaluate received and cleared payment in full for review by a program administrator to determine if the application is administratively complete (via integration with MiCaRS).	NA	NA	NA	NA	1	Solution can evaluate that it is paid in pull (and integration must be completed on a Time and Materials basis.)
105.2	The solution must allow a program administrator to record the non-administratively complete content and/or items.	NA	NA	NA	NA	1	The admin can record the information
Notification Method							
106.0	The solution must allow a program administrator to select the method(s) of notification to the applicant.	NA	NA	NA	NA	1	Only email or Portal message is available
106.1	Methods of notification must include: a) Document b) Message	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Administratively Incomplete Notifications							
107.0	The solution must notify the applicant a complete list of non-administratively complete content and/or items (one message or document listing all items).	NA	NA	NA	NA	1	When the admin requests more info, they can list what is needed
Re-Open Incomplete Applications							
108.0	The solution must re-open an on-line application for applicant updates when the application was determined to be administratively incomplete.	NA	NA	NA	NA	1	The application will be re-opened with state staff when items are updated and re-submitted
Administratively Complete Notifications							
109.0	The solution must provide notifications to identified recipients based on the application type and project location when an administratively complete application is received.	NA	NA	NA	NA	1	Emails are sent when an application is submitted
109.1	The solution must allow a workflow administrator to select the notification recipients for each application type according to their system user role (i.e., staff to be notified based on the type).	NA	NA	NA	NA	5	Not currently able to select recipients by user role. Time and Materials customization will be needed to add this capability.
Administratively Complete Notification for Non-System Recipients							
110.0	The solution must allow a user to enter the contact information for a recipient that is not a system user.	NA	NA	NA	NA	1	A system user can enter info for a non-user if the person entering

							information is a proxy or a state staff member
110.1	The solution must maintain the non-system user recipient as a contact.	NA	NA	NA	NA	1	Contact info does not need to be for a system user
Manual Application Entry							
111.0	The solution must allow a program administrator to enter an application on behalf of the applicant (e.g., when an administratively complete paper application is received).	NA	NA	NA	NA	1	Admin can enter an application
Workflow Initiation							
112.0	The solution must initiate a workflow when a paper application has been entered.	NA	NA	NA	NA	1	The admin will be able to start the application
Manual Entry Notification							
113.0	The solution must provide notification to the recipient when their application has been entered by someone else on their behalf.	NA	NA	NA	NA	1	Operator will receive an email
113.1	The solution must allow a workflow administrator to configure the user notification (i.e., only when the applicant has provided an email, etc.).	NA	NA	NA	NA	5	Notification cannot be configured per user. Time and Materials customization will be needed to add this capability.
Application Scoring							
114.0	The solution must be able to score applicant application based upon the EGLE criteria.	NA	NA	NA	NA	1	Solution does not score but tracks and displays whether criteria established by admin for each certification level have been met.
114.1	The solution must allow the application scoring criteria to be administratively configured.	NA	NA	NA	NA	1	Admin can set criteria for evaluation(see previous row).
114.2	The solution must allow separate scoring criteria by each application type (e.g. for each cert level, etc.)	5	This is not a feature of the software, but if information is needed on a subject, a report could be generated that shows a score.	1	SWIFT permits inspector to assign deficiencies and visualizes percent complete (for survey) and when deficiencies are addressed.	1	Solution does not score but tracks and displays whether criteria established by admin for each certification level have been met.
Withdrawing an Application							
115.0	The solution must allow a program administrator to withdraw an application on behalf of the applicant.	NA	NA	NA	NA	1	Admins can deny applications
115.1	The solution must prevent withdrawing an application based on the status of the application (i.e., after a certain point in the workflow, the application cannot be withdrawn).	NA	NA	NA	NA	1	The application can be denied at any point

115.2	The solution must allow functionality to delete supporting documentation for a withdrawn application after an administratively configurable number of days.	NA	NA	NA	NA	1 and 5	Applications are not currently withdrawn, just denied or left pending and attachments are not available yet. Time and Materials customization will be needed to add this capability.
115.2.1	The solution must allow the deletion of supporting documentation to be configured by application type (not all applications will require the supporting documentation to be deleted for a withdrawn application).	NA	NA	NA	NA	1 and 5	Applications are not currently withdrawn, just denied, or left pending and attachments are not available yet. Time and Materials customization will be needed to add this capability.
115.3	The solution must maintain a record of the withdrawn application and action to withdraw.	NA	NA	NA	NA	1 and 5	Applications are not currently withdrawn, just denied, or left pending. Time and Materials customization will be needed to add this capability.
115.4	The solution must allow for a program administrator to capture an optional reason for the withdrawal.	NA	NA	NA	NA	1 and 5	Applications are not currently withdrawn, just denied, or left pending. Time and Materials customization will be needed to add this capability.
115.4.1	The solution must allow for a note field and a system administratively maintained drop down list of values for the reason.	NA	NA	NA	NA	1 and 5	Applications are not currently withdrawn, just denied, or left pending. Time and Materials customization will be needed to add this capability.
Refunds for Withdrawn Applications							
116.0	The solution must determine if a withdrawn application is eligible for a refund.	NA	NA	NA	NA	5	Applications are not currently withdrawn, just denied, or left pending. Fees are not required until submitted. Time and Materials customization will be needed to add this capability.
116.1	The solution must require an administratively configurable approval to process the refund.	NA	NA	NA	NA	5	Applications are not currently withdrawn, just denied, or left pending. Fees are not required until submitted. Time and Materials customization will be needed to add this capability.

116.2	Refund eligibility must include:
	   a) Consideration for progress in the associated workflow (i.e., ineligible for a refund once assigned to inspector)
	   b) Eligibility by application type (i.e., some programs may not issue refunds)
		NA	NA	NA	NA	5	Applications are not currently withdrawn, just denied, or left pending. Fees are not required until submitted. Time and Materials customization will be needed to add this capability.

116.3	The solution must systematically issue the refund according to financial policy (i.e., issued via credit card for credit card payments, via EFT or check for check payments).	NA	NA	NA	NA	5	Applications are not currently withdrawn, just denied, or left pending. Fees are not required until submitted. Time and Materials customization will be needed to add this capability.
Notifications for Withdrawn Applications							
117.0	The solution must provide notification to the recipient when their application has been withdrawn.	NA	NA	NA	NA	1	Recipient is notified upon approval or denial with denial reason.
117.1	The solution must allow a workflow administrator to configure the user notification (i.e., only when the applicant has provided an email, etc.).	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Application Review							
118.0	The solution must allow a program administrator to review the administratively complete application.	NA	NA	NA	NA	1	Admin can review the applications
118.1	The solution must allow a program administrator to add other system users to the review work queue for a specific application.	NA	NA	NA	NA	1	System users (admin or state users) can review applications
118.1.1	The solution must notify additional reviewers when added to a review work queue.	NA	NA	NA	NA	1	Users are not currently assigned to applications but all staff can see applicants based on the authority given by the admin. (i.e. Waste water staff can NOT see drinking water operators information. As for notification, the information will show dynamically on the dashboard.
118.2	The solution must allow a reviewer to record their comments and recommendations.	NA	NA	NA	NA	1 and 5	Comments are available for a denial but not an approval. Time and Materials customization will be needed to add this capability.
118.3	The solution must allow a reviewer to compose messages to be systematically sent to one or more of the application contacts (i.e., messages to the applicant, designer, etc.).	NA	NA	NA	NA	5	Not currently able to compose messages. Time and Materials customization will be needed to add this capability.
Application Outcome							

119.0	The solution must allow a program administrator to record the application outcome by program type.	NA	NA	NA	NA	1	Able to record the outcome

119.1	Application outcomes must include:
	   a) Approved
	   b) Denied
		NA	NA	NA	NA	1	Approved and Denied are the available values

119.1.1	The solution must allow the outcome options to be configured by application type (i.e., not all applications will have the same outcomes available).	NA	NA	NA	NA	1	The career paths as created by the admin with different outcomes based on the requirements of each certificate type.
119.2	The solution must allow a program administrator to record the conditions for a conditional approval.	NA	NA	NA	NA	1 and 5	Need notes section for approvals but there is one note section for the operator. Time and Materials customization will be needed to add the missing capability.
119.3	The solution must allow a program administrator to indicate if an applicant appeals the outcome.	NA	NA	NA	NA	1	Notes can be added about the appeal
199.3.1	The solution must allow a program administrator to note the date and outcome of an appeal.	NA	NA	NA	NA	1	Notes can be added about the outcome of the appeal
Compliance							
120.0	The solution must carry forward the approval conditions in the related workflow(s) for compliance and/or inspections.	NA	NA	NA	NA	1	Approval conditions will still be available to see
Issue Permit/License/Certification							
121.0	The solution must generate the permit/license/certification for an approved application.	NA	NA	NA	NA	1	Certification is generated upon approval

121.1	The generated permit/license/certification/information must include:
	   a) Issued permit/license/certification/Renewal information (if applicable for the permit/license/certification/
	   b) Compliance information (if applicable for the permit/license/certification)
		NA	NA	NA	NA	1	Information is included in the permit

317.0	The solution must allow a program administrator to maintain a library of criteria for provisional (P), Temporary (T) and Restricted (R) license/permit/certifications.	NA	NA	NA	NA	1 and 2	The solution allows for different statuses, and the terminology can be configured to be EGLE-specific.
317.1	the solution must limit the selection of criteria based on license/permit/certification (e.g. the library must map the criteria to the license/permit/certification they can be used with).	NA	NA	NA	NA	1	This "career path" which shows progression between levels is set up by the CT Admin and governs the process flow. This establishes which criteria must be satisfied

							when an initial or upgrade application is started.
318.0	The solution must allow a program administrator to select from a library of conditions (Provisional, Temporary and Restricted) to include in the issued license/permit/certification based on the license/permit/certification type.	NA	NA	NA	NA	1	See previous response
Permit/License/Certificate/Maintenance							
122.0	The solution must allow a program administrator to maintain the format and content of the permit/license/certification/information for each application type in their program. (i.e., templates and letters maintenance).	NA	NA	NA	NA	1	Admins can maintain the format and content
Issued Permit/License/Certificate Access							
123.0	The solution must allow a program administrator to identify when and why a permit/license/certification is not available through the authenticated user portal.	NA	NA	NA	NA	1	Operators will be able to see why a certification is not available
Update Public Listing/Information							
124.0	The solution must update public facing reports regarding the issued permit/license/certification.	NA	NA	NA	NA	5	We do not currently publish to an public facing site. Time and Materials customization will be needed to add this capability.
ID							
125.0	The solution must issue a unique number to each permit/license/certification.	NA	NA	NA	NA	1	Each certification has a unique identifier
125.1	The solution must support sequence numbers by program type for permits/licenses/certifications issued for approved modifications during an active permit/license/certification window (i.e., construction plans are modified and approving during an active construction permit).	NA	NA	NA	NA	1	Sequence numbers are used for all certifications
125.2	The solution must allow the configuration administrator to configure the number format for each program.	NA	NA	NA	NA	5	Certification number formatting is set at implementation as of now. Time and Materials customization will be needed to add this administrative capability.
319.0	The solution must maintain a single operator ID reference for an operator that holds multiple permits/certifications/licenses.	NA	NA	NA	NA	1	Operators maintain one operator ID even with multiple certifications.
Certification Exams							
Exam Scoring Sheets							

320.0	The solution must allow a program administrator to export a data file supporting the pre-population of exam scoring sheets to identify the applicant and exam.	NA	NA	NA	NA	1	Tests and schedules can be exported
320.1	The data file must support being able to print scannable content on the exam result form so that when scanned, the results can be associated with the applicant and exam.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Import Exam Results							
126.0	The solution must allow for capturing and maintaining exam results associated with certifications.	NA	NA	NA	NA	1	Exam results are captured and stored
126.1	The solution must allow for importing *.CSV exam result files from Scantron scanners associated with "bubble" test sheets.	NA	NA	NA	NA	5	Cert Tracker allows an output for a CSV file to showing the testing schedule and operators set for that test and is ready to accept test scores. Time and Materials customization will be needed to add this capability.
126.1.1	The solution must associate the test sheet of the test taker with the associated application.	NA	NA	NA	NA	1	Cert Tracker allows an output for a CSV file to showing the testing schedule and operators set for that test and is ready to accept test scores. Each operator has a unique ID (which indicates both their name and their certification level). This ID allows for association of the score with their application.
126.1.1.2	The solution must have reconciliation functionality when a test sheet cannot be associated with an application (i.e., the name on the sheet does not match an active application for the exam/certification).	NA	NA	NA	NA	1	Cert Tracker displays the unrecognized operator or wrong cert level within the CSV file. The fix must be made manually.
126.1.2	The solution must accommodate bubble sheet data for Water Operator Exam (Scantron form # F-1712-PAR-L)	NA	NA	NA	NA		Cert Tracker allows an output for a CSV file to showing the testing schedule and operators set for that test and is ready to accept test scores. Support of this specific form is included in the associated integration services for this tool/system.
126.2	The solution must support use of web services to access exam results from EVAExam.	NA	NA	NA	NA	5	Yes. This will be possible after the configuration of the EVAExam web services. Time and Materials

							customization will be needed to add this capability.

Scoring

| 126.2 | The solution must allow an authorized system configuration administrator to maintain the criteria for passing each of the certification exams maintained in the solution. | NA | NA | NA | NA | 1 | Admin can set the exam passing criteria |

Workflow Initiation

| 127.0 | The solution must allow a workflow administrator to configure the initiation of workflows with the availability of test results. | NA | NA | NA | NA | 1 | Workflow initiates with applications when the exam score is available |
| 127.1 | Workflow functionality must include: a) Notification to applicant b) Issuance of certification(s) | NA | NA | NA | NA | 1 | Applicant is emailed when an exam score is added and when the certification is approved. Certification can't be approved until the exam score is added |

Certificates

321.0	The solution must support bulk printing of certifications (e.g. create a print job file for use with a 3rd party printing service).	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
322.0	The solution must support generating a digital image of the certificate for storing associated with the applicant.	NA	NA	NA	NA	1	The certificate can be generated through the application
322.1	The solution must support this for: a) on demand for single applicant b) on demand for all applicants that passed a single exam c) as part of a workflow for all applicants that passed a single exam d) on demand for all applicants that passed exams within a given date range	NA	NA	NA	NA	1 and 5	The certification generation feature is only available for one operator at a time. Time and Materials customization will be needed to add the missing capability.

Duplicate Certificates

| 128.0 | The solution must allow for charging the applicant for issuing a duplicate certificate. | NA | NA | NA | NA | 5 | Time and Materials customization will be needed to add this capability. |
| 323.0 | The solution must allow a program administrator to configure which certificate types can be reprinted by the applicant via a self service portal (e.g. which certificates can a user go to their portfolio in the solution and print on demand as a replacement/duplicate?) | NA | NA | NA | NA | 1 and 5 | No feature in place for admins to control reprinting. The operators can reprint their own certificate at any time. Time and Materials customization will be needed to add the missing capability. |

Course Approval

Course Provider Information

129.0	The solution must allow the reviewer to create and maintain course provider information.	NA	NA	NA	NA	1	This is currently available
129.1	The solution must create a unique ID for each course provider.	NA	NA	NA	NA	1	A Code is available to be a unique ID
129.2	the solution must maintain the existing provider ID for existing providers at time of go-live.	NA	NA	NA	NA	1	The migration of the existing code is part of the initial set-up under the SaaS.
Course Submission							
130.0	The solution must allow a course provider to submit courses for approval.	NA	NA	NA	NA	5	Cert Tracker does not support the course provider uploading course information. A future enhancement roadmap feature will allow an admin to collect course information using an Excel template and then bulk upload the approved course information represented in the Excel sheet.
130.1	Course information must include: a) Course method of delivery (online, class, etc.) b) Course location c) Course title d) Course description (drop down values administratively maintained) e) Supporting documentation (via upload, include agenda) f) Course justification g) CEC value applying for h) Provider Contact Info (to include website) i) Date of Submission (systematically populated)	NA	NA	NA	NA	1 and 5	Most information is included. Time and Materials customization will be needed to add the missing capability.
CEC Determination							
131.0	The solution must allow the course reviewer to determine the number of CECs.	NA	NA	NA	NA	1	CECs can be added to each course
ABE Approval							
132.0	The solution must allow the reviewer to update the database with the ABE's course approval decision and expiration date for the approval.	NA	NA	NA	NA	1	The same process described in Requirement 130 to approve courses in CT would be followed. CT would allow the solution admin to update Cert Tracker's database with the ABE course approval decision. The expiration date for the course approval is designated by the entry of the begin/end date

							ranges to take the course. The solution admin also can set the default maximum CEC values established by the ABE
324.0	The system must maintain a unique ID for each approved course (unique across all course, not just for a single provider).	NA	NA	NA	NA	1	GEC's course ID's are not provider-specific but unique across all courses.
Workflow Initiation							
133.0	The solution must initiate an approval workflow for course approval submitted by the course provider.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
134.0	The solution must initiate related workflow for notification and course list publication related to the ABE's decision.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Course Renewal							
325.0	The solution must provide notification to the program administrator and course provider when approval for a course is expiring.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
325.1	The solution must allow a program administrator to configure the number of days before approval expires in which to notify the program administrator and course provider of the upcoming approval expiration.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
326.0	The solution must pre-populate course information when a course provider is submitting an application for course approval renewal.	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
Continuing Education Credits							
Applicant Education Credit Submission							
135.0	The solution must allow an applicant to maintain a record of earned continuing education credits.	NA	NA	NA	NA	1	CECs are stored on the operator's page
135.1	The solution must allow an applicant to select the completed course from a list of approved courses.	NA	NA	NA	NA	1	The applicant may select the course that they completed from a list of approved courses that have been entered into Cert Tracker by the solution admin. The date that the applicant took the course must be within the begin and end date range set within CT by the solution admin. The applicant also can enter the CECs earned, up to the maximum value permitted by CT. The maximum CES is set by the

							solution admin and based on approvals by ABE ."
135.2	The solution must allow for an applicant to upload a course completion certificate.	NA	NA	NA	NA	1	Applicant can add attachment documentation
329.0	The solution must prevent an applicant from receiving CECs for the same course completed in the same renewal cycle (e.g. the solution would prevent CECs for a second instance of the same course being completed in the same renewal cycle).	NA	NA	NA	NA	5	Operators are currently allowed to add the same course more than once. Time and Materials customization will be needed to add this capability.
Workflow Initiation							
136.0	The solution must initiate an approval workflow for continuing education credits submitted by the applicant.	NA	NA	NA	NA	1	The approval workflow will be initiated when the operator submits their renewal application
Approved Course							
137.0	The solution must allow a program administrator to manage an approved list of continuation credit courses.	NA	NA	NA	NA	1	Admins can manage courses
137.1	The solution must include the provider, course descriptions and offered date/time in the list.	NA	NA	NA	NA	1	Courses include the information
Provider Education Credit Submission							
138.0	The solution must allow a course provider to enter a class roster for a complete class.	NA	NA	NA	NA	1	Licensed users can enter class rosters and batch upload roster information.
138.1	Roster information must include: a) First name b) Last name c) Email address d) Credits (if variable for the course) e) Operator ID or License # (of student) f) Course name g) Course date/time	NA	NA	NA	NA	1	Roster information can be included
138.2	The solution must allow a course provider to upload a data file representing the class roster information (i.e., MS Excel file in a specified format).	NA	NA	NA	NA	1	A licensed user can use an Excel file for a batch upload
327.0	The solution must allow a program administrator to set systematic approval of CEC based on received class rosters (e.g. be able to configure systematic CEC acceptance for an applicant based on being included on a course provider roster).	NA	NA	NA	NA	5	All uploaded/entered information is systematically accepted provided it meets formatting expectations. Time and Materials customization will be needed to add this capability.

ID	Requirement						Comments
328.0	The solution must allow a program administrator to audit a sampling of the systematic CEC approvals (e.g. the systematic acceptance is not applied until the audit is conducted and passed).	NA	NA	NA	NA	5	Time and Materials customization will be needed to add this capability.
328.1	The solution must allow a program administrator to set the audit sampling size (e.g. 100% of all CEC submissions based on course provider rosters are reviewed before approved, 20%, etc.).	NA	NA	NA	NA	1 and 5	No automatic CEC approval rate feature in place this feature of auditing percentage is for renewals only. Time and Materials customization will be needed to add this capability.
Contact Information							
139.0	The solution must prevent duplication of contacts when entering class roster information (i.e., reconcile John Smith and Johnathon Smith at time of data entry).	NA	NA	NA	NA	1	We validate by Operator ID verification.
139.1	The solution must create a new contact when a class roster entry cannot be matched to an existing contact.	NA	NA	NA	NA	5	New operator must be requested and approved before being able to have CECs. Time and Materials customization will be needed to add this capability.
Duplicate Records							
140.0	The solution must reconcile duplication of course completion between course provider information and application information.	NA	NA	NA	NA	5	Duplicate records are allowed as of now. Time and Materials customization will be needed to add this capability.
Application Renewal (Permit, License, Certification)							
Expiration Notice							
141.0	The solution must notify the applicant an administratively configurable number of days prior to the expiration.	NA	NA	NA	NA	1	Admin can set the email notifications
141.1	The solution must allow an authorized system configuration administrator to set the number of calendar days prior to the expiration.	NA	NA	NA	NA	1	Admins can set the number of days prior to expiration
141.1.1	The solution must support a separate configurable duration for each program/type.	NA	NA	NA	NA	1	Every certification duration is configurable
141.1.2	The solution must support a separate notification for each program/type (i.e., a campground construction permit may have a different notification than a septage hauler license).	NA	NA	NA	NA	5	Email notification text is not configured by the admin. Time and Materials customization will be needed to add this capability.
141.2	The solution must allow a program administrator to select the method(s) of notification to the applicant.	NA	NA	NA	NA	5	Methods are: Email or Portal message. Time and Materials customization will be needed to add this capability.

ID	Requirement						Comments
141.2.1	Methods of notification must include: a) Document b) Message	NA	NA	NA	NA	5	Email and Portal are the current methods. Time and Materials customization will be needed to add this capability.
Workflow Initiation							
142.0	The solution must allow a workflow administrator to configure the initiation of a workflow with the expiration notification.	NA	NA	NA	NA	1	A workflow can be initiated when an expiration notification is received
142.1	Workflow functionality must include: a) Initiating invoicing and accounting for assumed renewals b) Adjusting associated fees when renewals are late c) Status updates if applicable (i.e., identifying a grace period after expiration to be able to renew, etc.)	NA	NA	NA	NA	1	This can be done through the renewal process
Status							
143.0	The solution must systematically change the status of a permit/certification/license an administratively configured number of calendar days after the expiration date.	NA	NA	NA	NA	1	Certifications are set to expired status
143.1	The solution must allow an authorized system configuration administrator to configure the number of calendar days.	NA	NA	NA	NA	1	Admins set the expiration dates
143.2	The solution must allow an authorized system configuration administrator to set the status value (i.e., set to "lapse", "expired", etc.).	NA	NA	NA	NA	3	GEC has set the status value but admins can request new types at no additional cost to SOM.
143.2.1	The solution must support separate status values for each program/type.	NA	NA	NA	NA	5	The status applies to all type. Time and Materials customization will be needed to add this capability.
Status Notification							
144.0	The solution must notify the applicant of the status change.	NA	NA	NA	NA	1	Operators are notified of status change
145.0	The solution must update public facing reports regarding the permit/license/certification status change (where applicable).	NA	NA	NA	NA	5	Currently do not publish to any public facing sites. Time and Materials customization will be needed to add this capability.
Reminder Notifications							
146.0	The solution must be able to send reminders for completing renewals.	NA	NA	NA	NA	1	Reminder notifications can be set
146.1	The solution must allow reminders to be administratively configured by application type.	NA	NA	NA	NA	5	Reminders are not configured by admins. Time and Materials customization will be needed to add this capability.

146.1.1	Configuration options must include:
	  a) Number of days after expiration
	  b) Content of reminder
				NA	NA	5	Admins are not able to set the content of the reminder. Time and Materials customization will be needed to add this capability.

Sanitary Surveys							
Survey Trigger(s)							
147.0	The solution must allow an authorized configuration manager to configure the need for a sanitary survey.	NA	NA	1	Managers are able to configure the need for a survey and the dashboard calendar displays the appropriate date for the survey.	NA	NA
148.0	The solution must allow the trigger for a survey to be configured.	NA	NA	5	Surveys are not triggered into being created. Time and Materials customization will be needed to add this capability.	NA	NA

149.1.1	Sanitary Survey triggers must include:
	  a) Schedule-based (i.e., quarterly, annually, etc.)
	  b) Duration-based (i.e., X months after license was issued, etc.)
	  c) Criteria-based (i.e., analyte value, X issues in Y number of months, etc.)
	  d) Compliance activity/schedule
	  e) On-demand
		NA	NA	1 and 5	Surveys are only created on demand and are needed on the frequency created in the solution (i.e. 1 yr., 3 yr., 5 yr.). The next survey is displayed in the calendar and event reminders can be created and emailed to the appropriate staff.	NA	NA

Workflow Initiation							
150.0	The solution must allow the survey trigger to be configured to initiate a related workflow/sub workflow (to include related notifications and work assignment).	NA	NA	1	Workflows can be created within surveys	NA	NA
151.0	The solution must initiate related workflows according to the finalized survey findings (i.e., compliance activities/schedules, change in inspection schedules, etc.).	NA	NA	1	Workflows can be created based on survey findings	NA	NA
Survey Maintenance							
152.0	The solution must allow a program administrator to define and maintain the sanitary surveys.	NA	NA	1	Admins can maintain surveys	NA	NA
Survey Schedule							

153.0	The solution must allow an inspector to record the date of a scheduled sanitary survey (e.g., some sanitary surveys are pre-scheduled, and the date and associated activities/reminders are based on the scheduled date).	NA	NA	1	Inspectors can record dates	NA	NA
Conduct Survey							
154.0	The solution must allow an inspector to complete a survey.	NA	NA	1	Inspectors can complete surveys	NA	NA
154.1	The solution must allow an inspector to review related system-accessible information related to the survey.	NA	NA	1	Inspectors can review system related information	NA	NA
154.1.1	Related system-accessible information must include: a) Previous sanitary surveys b) Related monitoring and reporting data (where applicable) c) Complaints	NA	NA	1	Inspectors can review all information	NA	NA
154.1.2	The solution must allow an inspector to access related system-accessible information "off-line" (i.e., review the materials while in the field to conduct the sanitary survey).	NA	NA	1	Inspectors can review information "off-line" using the mobile application	NA	NA
154.2	The solution must allow an inspector to capture media files (photo, audio, video, etc.) related to a survey.	NA	NA	1	Inspectors can capture photos, video, and audio and upload them to the survey	NA	NA
154.3	The solution must allow an inspector to capture geospatial data related to the survey (i.e., lines, points and polygons related to survey notes and/or activities).	NA	NA	1	Inspectors can use the facility map to capture coordinates or enter text into comment or memo fields	NA	NA
154.4	The solution must allow an inspector to capture inspection content "off-line" (i.e., fill out an survey report, capture media, etc. while in the field to conduct the survey).	NA	NA	1	Inspectors can use the mobile app off-line	NA	NA
154.5	The solution must allow an inspector to manually add inspection items to an active survey (i.e., add a new location or piece of equipment discovered while conducting the survey).	NA	NA	1	Inspectors can add the listed inspection items, and many more	NA	NA
302.0	The solution must allow an inspector to filter completed survey questions based on the success of meeting an item so as to quickly view a list of items that were unfavorably met.	NA	NA	1	Inspectors can filter questions in the checklist or in the generated report	NA	NA
Signatures							
155.0	The solution must allow an inspector to capture acknowledgement from involved parties according to the workflow (i.e., capture an electronic signature of the water operator for the water supply being surveyed, etc.).	NA	NA	3	Electronic signature is not a current feature	NA	NA

Finalize Survey							
156.0	The solution must allow an inspector to finalize a completed inspection survey to the associated workflow.	NA	NA	1	Inspectors can finalize completed inspections	NA	NA
Compliance							
Compliance Schedules							
157.0	The solution must allow a system configuration administrator to configure schedules for compliance activities.	NA	NA	1	Compliance schedules can be configured	NA	NA
157.1	Compliance activities must include: a) Monitoring (i.e., monthly operating reports, etc.) b) Reporting (i.e., yearly self-assessment, notice of intent, failed system data report, pumpage reports, etc.)	NA	NA	1	Compliance activities contain all that are needed – pulled from SDWIS	NA	NA
157.2	The solution must allow compliance schedules to be associated with: a) Regulated entity b) Issued License c) Certifications	NA	NA	1 and 5	The solution is associated with the regulated entity based on SDWIS/State data entry instructions. However, no association exists with license or certifications. If there is a field in SDWIS that EGLE uses to store licenses and certifications, e.g., in the comment box or activities, that information could be entered into the compliance schedule.	NA	NA
Workflow Initiation							
158.0	The solution must allow a workflow administrator to associate compliance schedules with workflows.	NA	NA	1	Workflows can be created and associated to the creation of compliance schedules	NA	NA
Compliance Criteria							
159.0	The solution must identify compliance adherence for defined regulated activities and monitoring based on administratively configured criteria (e.g., receipt of monitoring reports by due date, monitored values for analytes within regulated ranges, receipt of payments by due dates, etc.).	NA	NA	1	Solution provides for compliance schedule activity updates and resolution dates, which automatically is calculated based on the compliance activity achieved dates. (The solution uses compliance schedule activities and deficiencies in	NA	NA

					SDWIS which are configured by the SDWIS admin.)		

Escalated Enforcement							
Candidates							
160.0	The solution must monitor for and identify escalated enforcement candidates.	NA	NA	1	Severity levels can be adjusted during surveys	NA	NA
161.0	The solution must allow an authorized configuration manager to define the criteria to identify escalated enforcement candidates.	NA	NA	1	Managers can define the criteria for escalation	NA	NA
161.1	Criteria must include: a) Significant deficiency notice b) Violation notice	NA	NA	1	Criteria can include both notices	NA	NA
162.0	The solution must allow a program administrator to identify candidates for escalated enforcement.	NA	NA	1	Admin can identify candidates	NA	NA
Workflow Initiation							
163.0	The solution must initiate a workflow when a candidate is identified for escalated enforcement.	NA	NA	1	Workflows can be created when a candidate is identified for escalated enforcement	NA	NA
163.1	The workflow must be specific to the program (i.e., CWS will have a different workflow than NCWS).	NA	NA	1	Workflows can be created for all scenarios	NA	NA
Documents							
164.0	The solution must manage and identify documents associated with escalated enforcement.	NA	NA	1	Documents can be added and managed for escalated enforcement	NA	NA
Notes							
165.0	The solution must allow notes and comments to be maintained for an escalated enforcement (i.e., track communications, scheduled meetings/hearings, referrals, etc.).	NA	NA	1	Notes and comments can be maintained	NA	NA
Impacted Entities							
166.0	The solution must identify entities associated with active escalated enforcement activities (i.e., clearly indicate which water supplies have active associated escalated enforcement activities).	NA	NA	1	It is a metric on the dashboard..	NA	NA
Status							
167.0	The solution must maintain and clearly display the current status and final outcome of escalated enforcement.	NA	NA	1	All deficiencies are displayed showing active or resolved date achieved.	NA	NA
Ad Hoc Query							

Libraries							
173.0	The solution must support ad hoc queries.		Ad hoc queries can be created in SWIMR Buddy. Some canned REST APIs have been created that generate a repository of data. States create queries in a separate Access database that they create and which they connect to the repository (similar to the data mart concept conceived by EPA when designing SDWIS/Prime). Note: The REST APIs provide most info needed for SWIFT.	1	See response to SWIMR.	5	The application does not have a feature for ad hoc queries. However, as part of SWIMR Buddy, EGLE can pull the data using REST APIs that will be provided for the state to use. If EGLE defines the data needed, GEC will provide the data for EGLE use in MS Access. This is a no cost addition, as we are building this capability into the product and it will be part of the SaaS.

The State also may consume the REST APIs and integrate it with MiEHDWIS or other databases.

Time and Materials customization will be needed to add this capability. . |
		1					
173.1	The solution must maintain a library of developed ad hoc queries.		The application does not maintain a library. Time and Materials customization will be needed to add this capability.		The application does not maintain a library. Time and Materials customization will be needed to add this capability.		The application does not maintain a library. Time and Materials customization will be needed to add this capability.
		5		5		5	
173.1.1	Library information must include: a) User that created it b) Original creation date/time c) Last date/time it was used d) Last date/time it was updated e) Related reports (i.e., was it created based on another ad hoc query?) f) Category g) Description		Library is not a feature that is available. Time and Materials customization will be needed to add this capability.		Library is not a feature that is available. Time and Materials customization will be needed to add this capability.		Library is not a feature that is available. Time and Materials customization will be needed to add this capability.
		5		5		5	
Access							
174.0	The solution must prevent visibility and modifications to an existing ad hoc query based on user roles.		SWIMR Buddy has vetting feature to only display information state		See response to SWIMR.		The application does not have a feature for ad hoc queries. Time
		1		1		5	

			wishes to show for that user.				and Materials customization will be needed to add this capability.
175.0	The solution must allow a query administrator to associate query access with roles.	1	Admin set vetting criteria (see response above).	1	See response to SWIMR	5	The application does not have a feature for ad hoc queries. Time and Materials customization will be needed to add this capability
Versioning							
176.0	The solution must allow an existing ad hoc query to be used as the foundation for a new ad hoc query.	1	See response to 173.0, above	1	See response to 173.0, above	5	The application does not have a feature for ad hoc queries. Time and Materials customization will be needed to add this capability
176.1	The solution must maintain relationship information when an existing ad hoc query was used to create a new ad hoc query.	1	See response to 173.0, above	1	See response to 173.0, above	5	The application does not have a feature for ad hoc queries. Time and Materials customization will be needed to add this capability
Maintenance							
177.0	The solution must allow a query administrator to define the ad hoc category values.	5	The application does not have a feature for ad hoc queries category values. Time and Materials customization will be needed to add this capability	5	The application does not have a feature for ad hoc queries category values. Time and Materials customization will be needed to add this capability	5	The application does not have a feature for ad hoc queries. Time and Materials customization will be needed to add this capability
177.1	The solution must allow a query administrator to configure the category values to be limited to the maintained list of values.	5	The application does not have a feature for ad hoc queries category values. Time and Materials customization will be needed to add this capability	5	The application does not have a feature for ad hoc queries category values. Time and Materials customization will be needed to add this capability	5	The application does not have a feature for ad hoc queries. Time and Materials customization will be needed to add this capability
OPTIONAL							
Public Web Portal							
Access							
168.0	The solution must allow a non-authenticated (public) user to interact with public accessible data via a web portal.	NA	NA	1	SWIFT allows for a timed remote survey to be conducted without a portal account	1	CT has an open web page for a new applicant that is not established in the portal as a user. They have the choice to be a user or remain a non-user of the portal and CT solution. The application must be a user to full use the CT solution.

Search and Filter							
169.0	The public web portal must support search and filter features using data values and interactive maps.	NA	NA	5	No access to the public. Time and Materials customization will be needed to add this capability.	5	No access to the public. Time and Materials customization will be needed to add this capability.
Dashboards/Display							
170.0	The public web portal must support public dashboards (and related dashboard functionality for drill-down, etc.).	NA	NA	5	No access to the public. Time and Materials customization will be needed to add this capability.	5	No access to the public. Time and Materials customization will be needed to add this capability.
Metrics							
171.0	The solution must track usage metrics associated access to and use of the public web portal (e.g. web analytics).	NA	NA	5	No access to the public. Time and Materials customization will be needed to add this capability.	5	No access to the public. Time and Materials customization will be needed to add this capability.
Branding							
172.0	The solution must brand the public web portal to be associated with the State of Michigan EGLE.	NA	NA	2	This can be set during implementation	2	This can be set during implementation
Analytics							
Timing							
178.0	Analytical analysis must include: a) Systematic analytics triggered by data value changes b) Systematic analytics scheduled based on point in time data values c) On-demand	4	SWIMR metrics, once available in the forthcoming dashboard enhancement, will be dynamic. They will be able to be adjusted using filters. An example of a metric is the number of violations without SOX	1	SWIFT metrics are dynamic and can be adjusted using filters (both data values and time values can be adjusted).	1	CT metrics are dynamic and can be adjusted using filters (both data values and time values can be adjusted).
Functionality							
179.0	Analytical functionality must include: a) Trends b) Threshold monitoring c) Relationship analysis d) Geospatial analysis e) Predictive modeling f) Statistical analysis	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.
Presentation							

180.0	The solution must support multiple analytics presentations:
	   a) Graph formats
	   b) Pie-chart formats
		4	There is a plan for metrics to be developed	1	Metrics of different presentations are available	4	More metrics can be added in different presentations

Maintenance							
183.0	The solution must allow the data analyst to manage the business rules and priorities applicable to the analytics (i.e., will not require a code change to refine the analysis).	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.
184.0	The solution must allow the data analyst to manage the data set used by the analytics (i.e., will not require a code change to modify the data elements being included).	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.	5	Time and Materials customization will be needed to add this capability.

EXHIBIT 2 to Schedule A
MIGRATION LIST

DRINKING WATER DATA SOURCES

Application Name	OTCTS (Operator Training Certification Tracking System)
Database Name	OTCTS
Current Technology	SQL DB
Number of Data Fields	See below
Number of Records	See below
Current Database Size	117.56 MB
CONTRACTOR APPROACH	GEC will map OTCTS data to Cert Tracker. We will review the mapping with EGLE to validate acceptance. Using the internal Development Environment, GEC will start the migration process and at intervals to be determined with EGLE will confirm that migration is successful and correct. Any data quality issues identified during this step will be discussed with EGLE staff and a plan to address the issues prior to the migration to either the EGLE Test or Pilot Environment will be created. Once data quality has been confirmed, all acceptable data will be migrated to the Pilot Environment. EGLE will have an opportunity to review the migrated data and conduct analyses to determine whether all expected records have migrated. GEC envisions some data within OTCTS will not map to CT. EGLE can contract with GEC on a Time and Materials basis to create a space to store these data or customize CT to accept it, if needed.

Table Details:

TableName	Fields	RowCount
pbcatcol	20	0
pbcatedt	7	21
pbcatfmt	4	20
pbcattbl	25	0
pbcatvld	5	0
tblAccess_Levels	4	4
tblBMPs	6	1
tblCert_Category	5	3
tblCert_Level	5	5
tblCert_Restricted_WSSN	7	331
tblCert_Special_Type	5	3
tblCertification_History	7	10541
tblCodes_Exam_Dates	4	68
tblConfirmationLetterLocations	16	29

TableName	Fields	RowCount
tblCounty	31	84
tblCourse_Company	26	357
tblCourse_Meals	2	9
tblCourse_Regis	30	192
tblDistrict	4	30
tblExamLocations	4	22
tblExam_History	18	27127
tblExam_Regis	24	951
tblExam_Scoring	6	15
tblExpirationDates	5	4
tblInvoice_Ledger	8	256
tblInvoice_Ledger_Items	9	145
tblOperator	34	15022
tblReceiptsAndInvoices	17	613
tblReceiptsAndInvoices_Items	6	765
tblRegional_Mtg_Location	7	18
tblRemarks	5	36
tblRemarks_Categories	2	3
tblReportParams	7	0
tblReports	31	95
tblStaffPositions	8	9
tblStaff_Codes	5	31
tblStatusCodes	4	5
tblTemp	17	0
tblUser_Access	6	95
tblWSSN	7	3769
tblCertification	11	6917
tblCourse	27	2170
tblSignatureBlock	9	8
tblStaff_Information	13	346
tblClass	25	221270
tblCert_Renew_Req	7	15

WASTEWATER DATA SOURCES

Application Name	**CEC Data base.accdb**
Database Name	**CEC Data base.accdb**
Current Technology	MS Access
Number of Data Fields	See below
Number of Records	See below
Current Database Size	See below
BIDDER RESPONSE	GEC will map CEC Database data to Cert Tracker. We will review the mapping with EGLE to validate acceptance. Using the internal Development Environment, GEC will start the migration process and at intervals to be determined with EGLE will confirm that migration is successful and correct. Any data quality issues identified during this step will be discussed with EGLE staff and a plan to address the issues prior to the migration to either the EGLE Test or Pilot Environment will be created. Once data quality has been confirmed, all acceptable data will be migrated to the Pilot Environment. EGLE will have an opportunity to review the migrated data and conduct analyses to determine whether all expected records have migrated. GEC envisions some data within CEC Database will not map to CT. EGLE can contract with GEC on a Time and Materials basis to create a space to store these data or customize CT to accept it, if needed.

Table Details:

- Course Table (815 records) – Used regularly. This table includes our current continuing education courses.

File   Home   Create   External Data   Database Tools   Help   Design   ⌕ Tell me what you want to do

Tables   ⦿ «

earch...   🔍

	Course Table
	Inactive Courses
	Provider Table

Field Name	Data Type	Description (Optional)
Course Code	Number	
Provider ID	Number	
Course Title	Short Text	
Course Type	Short Text	
CEC Category	Short Text	
CEC Value	Short Text	
Comments	Short Text	
Approval Date	Date/Time	
Expires 12/31	Number	
Active	Short Text	
Company Name	Short Text	
Contact	Short Text	
Address 1	Short Text	
City	Short Text	
Zip Code	Short Text	
Phone	Short Text	
email	Short Text	
Web Site	Short Text	
State	Short Text	

Field Properties

General   Lookup

Field Size	Single
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	Yes
Indexed	Yes (No Duplicates)
Text Align	General

- Inactive Courses Table (446 records) – This table includes past courses that were not renewed and are no longer active.

- Provider Table (315 records) – Maintain for historical information only. This includes course provider information.

Field Name	Data Type	Description (Optional)
Provider ID	Number	
Company Name	Short Text	
Contact	Short Text	
Address 1	Short Text	
Address 2	Short Text	
City	Short Text	
Zip Code	Number	
Phone	Short Text	
email	Short Text	
Web Site	Short Text	
State	Short Text	
Second Contact	Short Text	
Sec Contact Phone	Short Text	

Field Properties

General | Lookup

Field Size	Single
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	Yes
Indexed	Yes (No Duplicates)
Text Align	General

Application Name	**construction master.mdb**
Database Name	**construction master.mdb**
Current Technology	MS Access
Number of Data Fields	See below
Number of Records	See below
Current Database Size	See below
BIDDER RESPONSE	GEC will map construction master.mdb data to Cert Tracker. We will review the mapping with EGLE to validate acceptance. Using the internal Development Environment, GEC will start the migration process and at intervals to be determined with EGLE will confirm that migration is successful and correct. Any data quality issues identified during this step will be discussed with EGLE staff and a plan to address the issues prior to the migration to either the EGLE Test or Pilot Environment will be created. Once data quality has been confirmed, all acceptable data will be migrated to the Pilot Environment. EGLE will have an opportunity to review the migrated data and conduct analyses to determine whether all expected records have migrated. GEC envisions some data within construction master.mdb will not map to CT. EGLE can contract with GEC on a Time and Materials basis to create a space to store these data or customize CT to accept it, if needed.

Table Details:

- Failed List Table (16 records) – Recently created. Currently, do not keep a database record for storm water operators who fail their exams but doing so is desired

File   Home   Create   External Data   Database Tools   Help   Design   🔍 Tell me what you want to do

Tables ▼ «

Failed List	Table	
Date Created: 3/26/2020 2:39:0...		
Date Modified: 11/16/2020 4:00...		
Paste Errors	Table	
Date Created: 9/11/2020 11:00:...		
Date Modified: 9/11/2020 11:00...		
SWCONSTRUCTION	Table	
Date Created: 9/22/1997 3:32:5...		
Date Modified: 12/11/2020 10:0...		
temp	Table	
Date Created: 5/23/1997 11:25:...		
Date Modified: 12/11/2020 9:58...		
Terminated	Table	
Date Created: 9/26/2003 11:49:...		
Date Modified: 9/11/2020 9:49:...		

Field Name	Data Type	Description (Optional)
ID	AutoNumber	
FNAME	Short Text	HOME ADD
LNAME	Short Text	
ADD1	Short Text	
ADD2	Short Text	
CITY ST	Short Text	HOME
ZIP	Short Text	
Email	Short Text	
EMPLOYER ADD	Short Text	
ADD3	Short Text	
ADD4	Short Text	
ADD5	Short Text	
EMP CITY ST	Short Text	
EMP ZIP	Short Text	
CERT #	Short Text	Cert
EXAM SCORE	Number	
Expiration	Short Text	
CLASSIFICATION	Short Text	
RENEWAL STATUS	Short Text	

Field Properties

General   Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

- Paste Errors Table (1 record) – One entry from a paste error in another table.

- SWCONSTRUCTION Table (6898 records) – Used daily; includes all active operators.

Field Name	Data Type	Description (Optional)
CERT DATE	Date/Time	
FNAME	Short Text	
LNAME	Short Text	
ADD1	Short Text	
ADD2	Short Text	
CITY ST	Short Text	
ZIP	Short Text	
Email	Short Text	
EMPLOYER ADD	Short Text	
ADD3	Short Text	
ADD4	Short Text	
ADD5	Short Text	
EMP CITY ST	Short Text	
EMP ZIP	Short Text	
CERT #	Short Text	CERT
EXAM SCORE	Number	
EXPIRATION	Short Text	
Classification	Short Text	
LETTER MAILED	Yes/No	

Field Properties

General | Lookup

Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Indexed	No
IME Mode	No Control
IME Sentence Mode	None
Text Align	General
Show Date Picker	For dates

- Temp Table (number varies) – This table is used for exam data entry and creation of certificates and results letters. Usually it has zero entries but during a grading week, it can have anywhere from 20-40 entries. Once results are issued, these entries are moved to the SWCONSTRUCTION Table.

- Terminated Table (10,690 records) - Operators who have not renewed their license and become inactive according to records retention schedule.

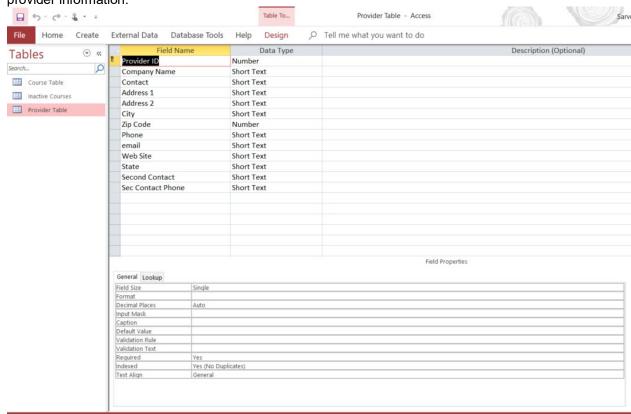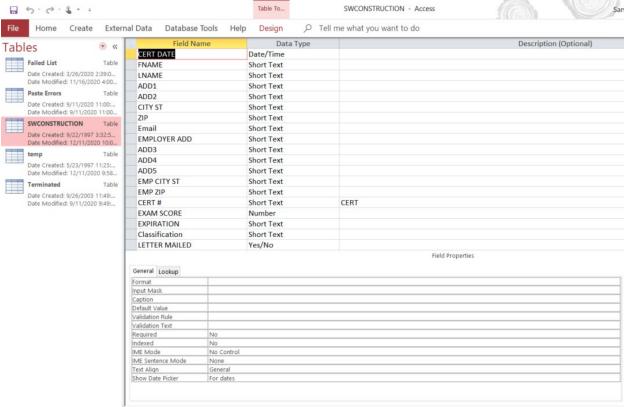| Application Name	INDUSTRIAL MASTER.mdb
Database Name	INDUSTRIAL MASTER.mdb
Current Technology	MS Access
Number of Data Fields	See below
Number of Records	See below
Current Database Size	See below
BIDDER RESPONSE	GEC will map INDUSTRIAL MASTER.mdb data to Cert Tracker. We will review the mapping with EGLE to validate acceptance. Using the internal Development Environment, GEC will start the migration process and at intervals to be determined with EGLE will confirm that migration is successful and correct. Any data quality issues identified during this step will be discussed with EGLE staff and a plan to address the issues prior to the migration to either the EGLE Test or Pilot Environment will be created. Once data quality has been confirmed, all acceptable data will be migrated to the Pilot Environment. EGLE will have an opportunity to review the migrated data and conduct analyses to determine whether all expected records have migrated. GEC envisions some data within INDUSTRIAL MASTER.mdb will not map to CT. EGLE can contract with GEC on a Time and Materials basis to create a space to store these data or customize CT to accept it, if needed.

Table Details:

- CAFO Certification Table (1 blank record) – Historical certification type. This was a table that was used temporarily to enter data and eventually moved into the Industrial Master Table.

File   Home   Create   External Data   Database Tools   Help   Design   Tell me what you want to do

Tables

CAFO Certification

CAFO Certification

CAFO Terminated

INDUSTRIAL DESTROYED

INDUSTRIAL MASTER

Paste Errors

Field Name	Data Type	Description (Optional)
Date Entered	Short Text	
New	Yes/No	
CAFO CertificationID	AutoNumber	
Certificate Number	Short Text	
FirstName	Short Text	
LastName	Short Text	
Address 1	Short Text	
Address 2	Short Text	
City, State	Short Text	
Zip Code	Short Text	
Employer	Short Text	
Emp Address 2	Short Text	
Emp Address 3	Short Text	
Emp City, State	Short Text	
Emp Zip Code	Short Text	
Exam Score	Short Text	

Field Properties

General   Lookup

Field Size	50
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

- CAFO Terminated Table (360 records) – CAFO is a certification that is no longer used. These people were certified but have become inactive over time. Data needed for historical purposes only.

Field Name	Data Type	Description (Optional)
Date Entered	Short Text	
New	Yes/No	
CAFO CertificationID	AutoNumber	
Certificate Number	Short Text	
FirstName	Short Text	
LastName	Short Text	
Address 1	Short Text	
Address 2	Short Text	
City, State	Short Text	
Zip Code	Short Text	
Employer	Short Text	
Emp Address 2	Short Text	
Emp Address 3	Short Text	
Emp City, State	Short Text	
Emp Zip Code	Short Text	
Exam Score	Short Text	
Exam Date	Short Text	
Expires July	Short Text	
Renewal Status	Short Text	

Field Properties

General Lookup

Field Size	50
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

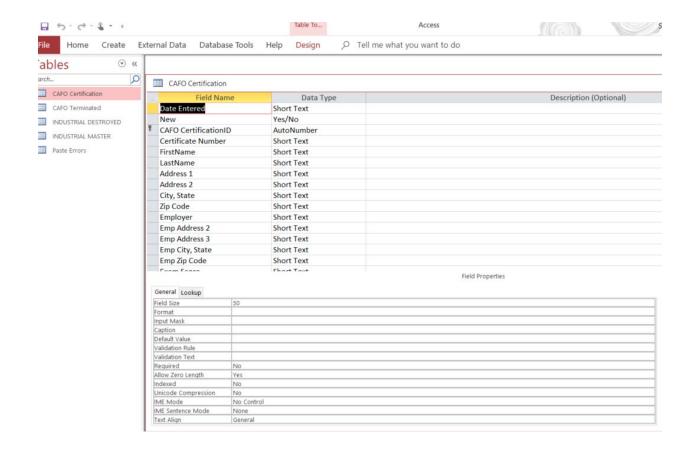- Industrial Destroyed Table (2235) – Operators who have not renewed their license and become inactive according to records retention schedule.

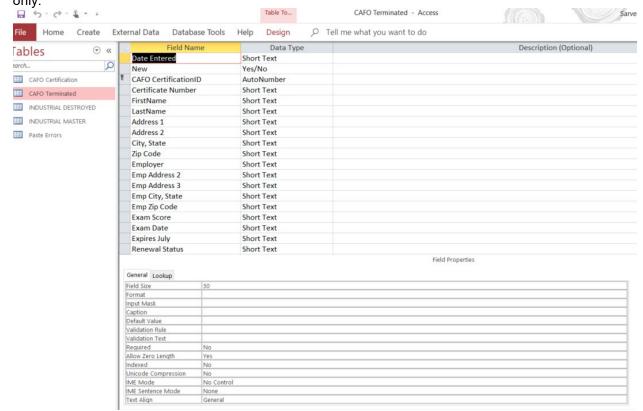- Industrial Master Table (3003) – Table is used daily; includes all active operators and examinees

Field Name	Data Type	Description (Optional)
ID	AutoNumber	
LNAME	Short Text	
FNAME	Short Text	
ADDRESS1	Short Text	
ADDRESS2	Short Text	
CITY,ST	Short Text	
e-mail address	Short Text	
ZIP	Short Text	
W	Number	
SYMBOL	Short Text	
DATE	Short Text	
CLASS	Short Text	
EMPLOYER	Short Text	
ADDRESS3	Short Text	
ADDRESS4	Short Text	
ADDRESS5	Short Text	
EMPCITY-ST	Short Text	
ZC	Short Text	
EXPIRES JULY 1	Number	

Field Properties

General | Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	No
Text Align	General

- Paste Errors (1 record) – One entry from a paste error in another table.

Field Name	Data Type	Description (Optional)
LNAME	Short Text	
FNAME	Short Text	
ADDRESS1	Short Text	
ADDRESS2	Short Text	
CITY,ST	Short Text	
ZIP	Short Text	
W	Number	
APPLIED	Short Text	
CLASS	Short Text	
ACTIVITY	Short Text	
EXPIRES JULY 1	Number	
EXAMYR	Short Text	
LOC	Short Text	
APPROVED	Short Text	
DENIED	Short Text	
PASSED	Short Text	
SYMBOL	Short Text	
COMMENTS	Short Text	
Old String	Short Text	

Field Properties

General | Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

Application Name	Industrial mastersw.mdb
Database Name	Industrial mastersw.mdb
Current Technology	MS Access
Number of Data Fields	See below
Number of Records	See below
Current Database Size	See below
BIDDER RESPONSE	GEC will map Industrial mastersw.mdb data to Cert Tracker. We will review the mapping with EGLE to validate acceptance. Using the internal Development Environment, GEC will start the migration process and at intervals to be determined with EGLE will confirm that migration is successful and correct. Any data quality issues identified during this step will be discussed with EGLE staff and a plan to address the issues prior to the migration to either the EGLE Test or Pilot Environment will be created. Once data quality has been confirmed, all acceptable data will be migrated to the Pilot Environment. EGLE will have an opportunity to review the migrated data and conduct analyses to determine whether all expected records have migrated. GEC envisions some data within Industrial mastersw.mdb will not map to CT. EGLE can contract with GEC on a Time and Materials basis to create a space to store these data or customize CT to accept it, if needed.

Table Details:

- Failure List Table (18 records) – Recently created to keep track of storm water operators who fail their exams.

- Industrial SW Table (5773 records) – Used daily; this includes all active operators.

- Industrial Temp Table (number varies) – This table is used for exam data entry and creation of certificates and results letters. Usually has zero entries but during a grading week, it can have anywhere from 20-40 entries. Once results are issues, these entries are moved to the Industrial SW Table.

b

- Paste Errors (611 records) – Paste errors for entries that exist in another table

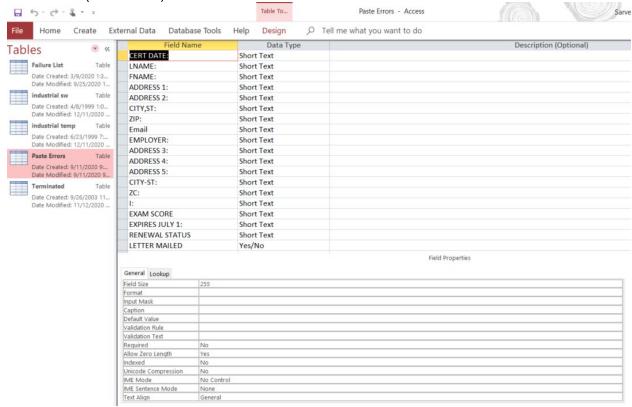| Field Name	Data Type	Description (Optional)
CERT DATE:	Short Text	
LNAME:	Short Text	
FNAME:	Short Text	
ADDRESS 1:	Short Text	
ADDRESS 2:	Short Text	
CITY,ST:	Short Text	
ZIP:	Short Text	
Email	Short Text	
EMPLOYER:	Short Text	
ADDRESS 3:	Short Text	
ADDRESS 4:	Short Text	
ADDRESS 5:	Short Text	
CITY-ST:	Short Text	
ZC:	Short Text	
I:	Short Text	
EXAM SCORE	Short Text	
EXPIRES JULY 1:	Short Text	
RENEWAL STATUS	Short Text	
LETTER MAILED	Yes/No	

Field Properties

General | Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

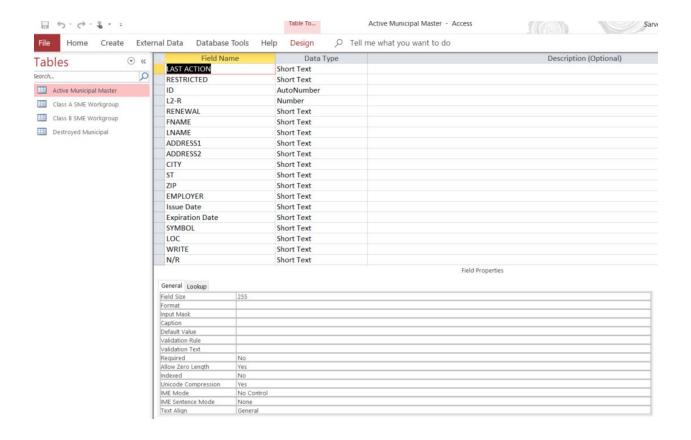- Terminated Table (10,315 records) – Operators who have not renewed their license and become inactive according to records retention schedule
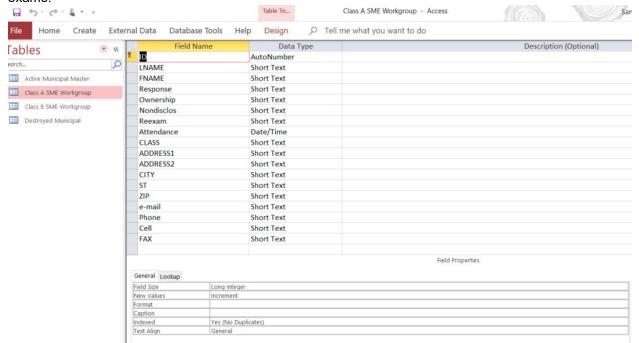

Field Name	Data Type	Description (Optional)
CERT DATE:	Short Text	
FNAME:	Short Text	
LNAME:	Short Text	
ADDRESS 1:	Short Text	
ADDRESS 2:	Short Text	
CITY,ST:	Short Text	
Email	Short Text	
ZIP:	Short Text	
EMPLOYER:	Short Text	
ADDRESS 3:	Short Text	
ADDRESS 4:	Short Text	
ADDRESS 5:	Short Text	
CITY-ST:	Short Text	
ZC:	Short Text	
I:	Short Text	
EXAM SCORE	Short Text	
EXPIRES JULY 1:	Short Text	
RENEWAL STATUS	Short Text	
LETTER MAILED	Yes/No	

Field Properties

General | Lookup

Field Size	10
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

Application Name	MUNICIPAL MASTER.mdb
Database Name	MUNICIPAL MASTER.mdb
Current Technology	MS Access
Number of Data Fields	See below
Number of Records	See below
Current Database Size	See below
BIDDER RESPONSE	GEC will map Municipal master.mdb data to Cert Tracker. We will review the mapping with EGLE to validate acceptance. Using the internal Development Environment, GEC will start the migration process and at intervals to be determined with EGLE will confirm that migration is successful and correct. Any data quality issues identified during this step will be discussed with EGLE staff and a plan to address the issues prior to the migration to either the EGLE Test or Pilot Environment will be created. Once data quality has been confirmed, all acceptable data will be migrated to the Pilot Environment. EGLE will have an opportunity to review the migrated data and conduct analyses to determine whether all expected records have migrated.

GEC envisions some data within Municipal master.mdb will not map to CT. EGLE can contract with GEC on a Time and Materials basis to create a space to store these data or customize CT to accept it, if needed. |

Table Details:
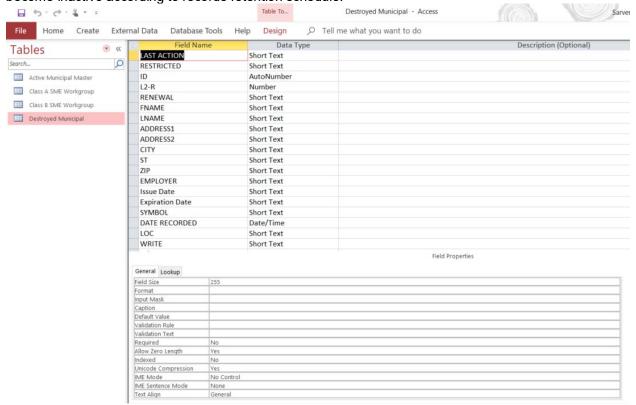- Active Municipal Master Table (3501 records) – Used daily; this includes all active operators and examinees.

File   Home   Create   External Data   Database Tools   Help   Design   Tell me what you want to do

Tables

Search...

- Active Municipal Master
- Class A SME Workgroup
- Class B SME Workgroup
- Destroyed Municipal

Field Name	Data Type	Description (Optional)
LAST ACTION	Short Text	
RESTRICTED	Short Text	
ID	AutoNumber	
L2-R	Number	
RENEWAL	Short Text	
FNAME	Short Text	
LNAME	Short Text	
ADDRESS1	Short Text	
ADDRESS2	Short Text	
CITY	Short Text	
ST	Short Text	
ZIP	Short Text	
EMPLOYER	Short Text	
Issue Date	Short Text	
Expiration Date	Short Text	
SYMBOL	Short Text	
LOC	Short Text	
WRITE	Short Text	
N/R	Short Text	

Field Properties

General | Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

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- Class A SME Workgroup Table (25 records) – Historical information to maintain; these were operators who were part of our subject matter expert team for putting together the higher level exams.

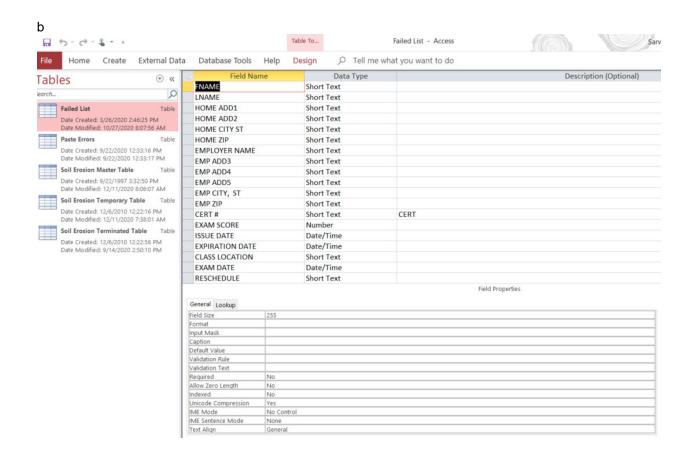- Class B SME Workgroup Table (1 incomplete record) – Not used.

- Destroyed Municipal Table (3960 records) - Operators who have not renewed their license and become inactive according to records retention schedule.
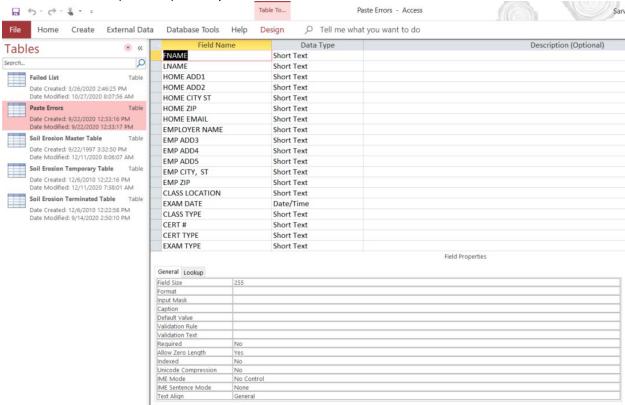
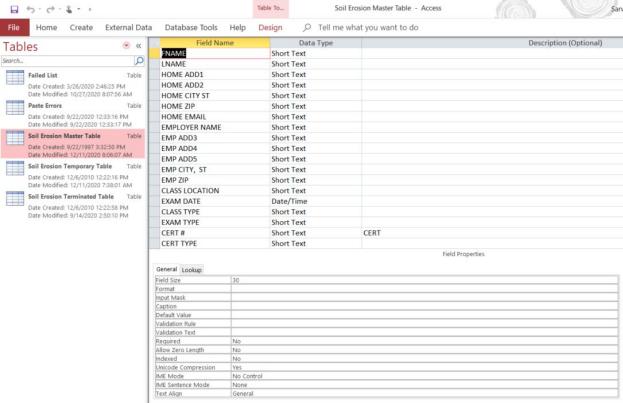| Application Name	Soil Erosion Control.mdb
Database Name	Soil Erosion Control.mdb
Current Technology	MS Access
Number of Data Fields	See below
Number of Records	See below
Current Database Size	See below
BIDDER RESPONSE	GEC will map Soil Erosion Control.mdb data to Cert Tracker. We will review the mapping with EGLE to validate acceptance. Using the internal Development Environment, GEC will start the migration process and at intervals to be determined with EGLE will confirm that migration is successful and correct. Any data quality issues identified during this step will be discussed with EGLE staff and a plan to address the issues prior to the migration to either the EGLE Test or Pilot Environment will be created. Once data quality has been confirmed, all acceptable data will be migrated to the Pilot Environment. EGLE will have an opportunity to review the migrated data and conduct analyses to determine whether all expected records have migrated. GEC envisions some data within Soil Erosion Control.mdb will not map to CT. EGLE can contract with GEC on a Time and Materials basis to create a space to store these data or customize CT to accept it, if needed.

Table Details:

- Failed List Table (17 records) – Recently created to keep track storm water operators who fail their exams.
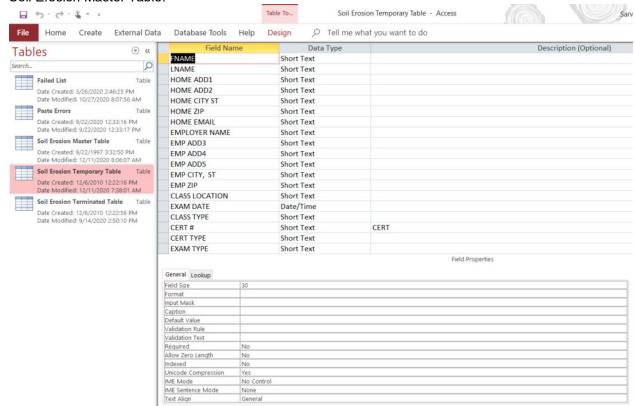
b

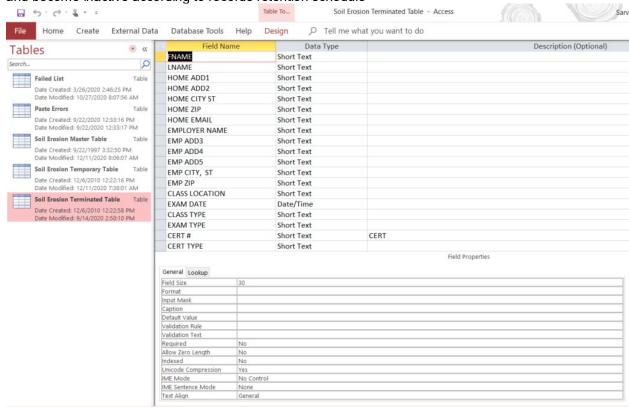- Paste Errors Table (1 record) – One paste error record that exists in another table

- Soil Erosion Master Table (1819 records) – Used daily; this includes all active operators

- Soil Erosion Temporary Table (number varies) - This table is used for exam data entry and creation of certificates and results letters. Usually it has zero entries but, during a grading week, it can have anywhere from 2-10 entries. Once results are issued, these entries are moved to the Soil Erosion Master Table.

- Soil Erosion Terminated Table (1164 records) - Operators who have not renewed their license and become inactive according to records retention schedule

SCHEDULE B
Service Level Agreement

1. **Definitions.** For purposes of this Schedule, the following terms have the meanings set forth below. All initial capitalized terms in this Schedule that are not defined in this **Section 1** shall have the respective meanings given to them in the Contract.

"**Actual Uptime**" means the total minutes in the Service Period that the Hosted Services are Available.

"**Availability**" has the meaning set forth in **Section 4(a)**.

"**Availability Requirement**" has the meaning set forth in **Section 4(a)**.

"**Available**" has the meaning set forth in **Section 4(a)**.

"**Contractor Service Manager**" has the meaning set forth in **Section 3.1**.

"**Corrective Action Plan**" has the meaning set forth in **Section 5.6**.

"**Critical Service Error**" has the meaning set forth in **Section 5.4(a)**.

"**Exceptions**" has the meaning set forth in **Section 4.2**.

"**Force Majeure Event**" has the meaning set forth in **Section 6.1**.

"**High Service Error**" has the meaning set forth in **Section 5.4(a)**.

"**Hosted Services**" has the meaning set forth in **Section 2.1(a).**

"**Low Service Error**" has the meaning set forth in **Section 5.4(a).**

"**Medium Service Error**" has the meaning set forth in **Section 5.4(a).**

"**Resolve**" has the meaning set forth in **Section 5.4 (b).**

"**Scheduled Downtime**" has the meaning set forth in **Section 4.3.**

"**Scheduled Uptime**" means the total minutes in the Service Period.

"**Service Availability Credits**" has the meaning set forth in **Section 4.6(a).**

"**Service Error**" means any failure of any Hosted Service to be Available or otherwise perform in accordance with this Schedule.

"**Service Level Credits**" has the meaning set forth in **Section 5.5.**

"**Service Level Failure**" means a failure to perform the Software Support Services fully in compliance with the Support Service Level Requirements.

"**Service Period**" has the meaning set forth in **Section 4(a).**

"**Software**" has the meaning set forth in the Contract.

"**Software Support Services**" has the meaning set forth in **Section 5.**

"**State Service Manager**" has the meaning set forth in **Section 3.2.**

"**State Systems**" means the information technology infrastructure, including the computers, software, databases, electronic systems (including database management systems) and networks, of the State or any of its designees.

"**Support Request**" has the meaning set forth in **Section 5.4(a).**

"**Support Service Level Requirements**" has the meaning set forth in **Section 5.4**.

"**Term**" has the meaning set forth in the Contract.

2. Services.

2.1   Services. Throughout the Term, Contractor will, in accordance with all terms and conditions set forth in the Contract and this Schedule, provide to the State and its Authorized Users the following services:

(a)   the hosting, management and operation of the Software and other services for remote electronic access and use by the State and its Authorized Users ("**Hosted Services**");

(b)   the Software Support Services set forth in **Section 5** of this Schedule;

3. Personnel

3.1   Contractor Personnel for the Hosted Services. Contractor will appoint a Contractor employee to serve as a primary contact with respect to the Services who will have the authority to act on behalf of Contractor in matters pertaining to the receipt and processing of Support Requests and the Software Support Services (the "**Contractor Service Manager**"). **The Contractor Service Manager** will be considered Key Personnel under the Contract.

3.2   State Service Manager for the Hosted Services. The State will appoint and, in its reasonable discretion, replace, a State employee to serve as the primary contact with respect to the Services who will have the authority to act on behalf of the State in matters pertaining to the Software Support Services, including the submission and processing of Support Requests (the "**State Service Manager**").

4. Service Availability and Service Availability Credits.

(a)   Availability Requirement. Contractor will make the Hosted Services Available, as measured over the course of each calendar month during the Term and any additional periods during which Contractor does or is required to perform any Hosted Services (each such calendar month, a "**Service Period**"), at least 99.98% of the time, excluding only the time the Hosted Services are not Available solely as a result of one or more Exceptions (the "**Availability Requirement**"). "**Available**" means the Hosted Services are available and operable for access and use by the State and its Authorized Users over the Internet in material conformity with the Contract. "**Availability**" has a correlative meaning. The Hosted Services are not considered Available in the event of a material performance degradation or inoperability of the Hosted Services, in whole or in part. The Availability Requirement will be calculated for the Service Period as follows: (Actual Uptime – Total Minutes in Service Period Hosted Services are not Available Due to an Exception) ÷ (Scheduled Uptime – Total Minutes in Service Period Hosted Services are not Available Due to an Exception) x 100 = Availability.

4.2   Exceptions. No period of Hosted Service degradation or inoperability will be included in calculating Availability to the extent that such downtime or degradation is due to any of the following ("**Exceptions**"):

(a)   failures of the State's or its Authorized Users' internet connectivity;

(b)   Scheduled Downtime as set forth in **Section 4.3.**

4.3   Scheduled Downtime. Contractor must notify the State at least twenty-four (24) hours in advance of all scheduled outages of the Hosted Services in whole or in part ("**Scheduled Downtime**"). All such scheduled outages will: (a) last no longer than five (5) hours; (b) be scheduled between the hours of 6:00 p.m. and 5:00 a.m. Eastern Time; and (c) occur no more frequently than once per week; provided that Contractor may request the State to approve extensions of Scheduled Downtime above five (5) hours, and such approval by the State may not be unreasonably withheld or delayed.

4.4   Software Response Time. Software response time, defined as the interval from the time the end user sends a transaction to the time a visual confirmation of transaction completion is received, must be less than two (2) seconds for 98% of all transactions. Unacceptable response times shall be considered to make the Software unavailable and will count against the Availability Requirement.

4.5   Service Availability Reports. Within thirty (30) days after the end of each Service Period, Contractor will provide to the State a report describing the Availability and other performance of the Hosted Services during that calendar month as compared to the Availability Requirement. The report must be in electronic or such other form as the State may approve in writing and shall include, at a minimum: (a) the actual performance of the Hosted Services relative to the Availability Requirement; and (b) if Hosted Service performance has failed in any respect to meet or exceed the Availability Requirement during the reporting period, a description in sufficient detail to inform the State of the cause of such failure and the corrective actions the Contractor has taken and will take to ensure that the Availability Requirement are fully met.

4.6   Remedies for Service Availability Failures.

(a)   If the actual Availability of the Hosted Services is less than the Availability Requirement for any Service Period, such failure will constitute a Service Error for which Contractor will issue to the State the following credits on the fees payable for Hosted Services provided during the Service Period ("**Service Availability Credits**"):

Availability	Credit of Fees
≥99.98%	None
<99.98% but ≥99.0%	15%
<99.0% but ≥95.0%	50%
<95.0%	100%

(b)   Any Service Availability Credits due under this **Section 4.6** will be applied in accordance with payment terms of the Contract.

(c)   If the actual Availability of the Hosted Services is less than the Availability Requirement in any two (2) of four (4) consecutive Service Periods, then, in addition to all other remedies available to the State, the State may terminate the Contract on written notice to Contractor with no liability, obligation or penalty to the State by reason of such termination.

5. Support and Maintenance Services. Contractor will provide Hosted Service maintenance and support services (collectively, "**Software Support Services**") in accordance with the provisions of this **Section 5**. The Software Support Services are included in the Services, and Contractor may not assess any additional fees, costs or charges for such Software Support Services.

5.1 Support Service Responsibilities. Contractor will:

(a)   correct all Service Errors in accordance with the Support Service Level Requirements, including by providing defect repair, programming corrections and remedial programming;

(b)   provide unlimited telephone support 9:00a.m. to 5:00p.m. Eastern Time, Monday through Friday;

(c)   provide unlimited online support 24 hours a day, seven days a week through access to the Contractor's Knowledge Center and online/email-based Zendesk ticket support system;

(d)   provide online access to technical support bulletins and other user support information and forums, to the full extent Contractor makes such resources available to its other customers; and

(e)   respond to and Resolve Support Requests as specified in this **Section 5.**

5.2 Service Monitoring and Management. Contractor will continuously monitor and manage the Hosted Services to optimize Availability that meets or exceeds the Availability Requirement. Such monitoring and management includes:

(a)   proactively monitoring on a twenty-four (24) hour by seven (7) day basis all Hosted Service functions, servers, firewall and other components of Hosted Service security;

(b)   if such monitoring identifies, or Contractor otherwise becomes aware of, any circumstance that is reasonably likely to threaten the Availability of the Hosted Service, taking all necessary and reasonable remedial measures to promptly eliminate such threat and ensure full Availability; and

(c)   if Contractor receives knowledge that the Hosted Service or any Hosted Service function or component is not Available (including by written notice from the State pursuant to the procedures set forth herein):

(i)   confirming (or disconfirming) the outage by a direct check of the associated facility or facilities;

(ii)   if Contractor's facility check in accordance with clause (i) above confirms a Hosted Service outage in whole or in part: (A) notifying the State in writing pursuant to the procedures set forth herein that an outage has occurred, providing such details as may be available, including a Contractor trouble ticket number, if appropriate, and time of outage; and (B) working all problems causing and caused by the outage until they are Resolved as Critical Service Errors in accordance with the Support Request Classification set forth in **Section 5.4**, or, if determined to be an internet provider problem, open a trouble ticket with the internet provider; and

(iii)   notifying the State that Contractor has fully corrected the outage and any related problems, along with any pertinent findings or action taken to close the trouble ticket.

5.3   <u>Service Maintenance</u>. Contractor will continuously maintain the Hosted Services to optimize Availability that meets or exceeds the Availability Requirement. Such maintenance services include providing to the State and its Authorized Users:

(a)   all updates, bug fixes, enhancements, new releases, new versions and other improvements to the Hosted Services, including the Software, that Contractor provides at no additional charge to its other similarly situated customers; and

(b)   all such services and repairs as are required to maintain the Hosted Services or are ancillary, necessary or otherwise related to the State's or its Authorized Users' access to or use of the Hosted Services, so that the Hosted Services operate properly in accordance with the Contract and this Schedule.

5.4   <u>Support Service Level Requirements</u>. Contractor will correct all Service Errors and respond to and Resolve all Support Requests in accordance with the required times and other terms and conditions set forth in this **Section 5.4** ("**Support Service Level Requirements**"), and the Contract.

(a)   <u>Support Requests</u>. The State will classify its requests for Service Error corrections in accordance with the descriptions set forth in the chart below (each a "**Support Request**"). The State

Service Manager will notify Contractor of Support Requests by email, telephone or such other means as the parties may hereafter agree to in writing.

Support Request Classification	Description: Any Service Error Comprising or Causing any of the Following Events or Effects
Critical Service Error	• Issue affecting entire system or single critical production function; • System down or operating in materially degraded state; • Data integrity at risk; • Declared a Critical Support Request by the State; or • Widespread access interruptions.
High Service Error	• Primary component failure that materially impairs its performance; or • Data entry or access is materially impaired on a limited basis.
Medium Service Error	• Hosted Service is operating with minor issues that can be addressed with an acceptable (as determined by the State) temporary work around.
Low Service Error	• Request for assistance, information, or services that are routine in nature.

(b)   Response and Resolution Time Service Levels. Response and Resolution times will be measured from the time Contractor receives a Support Request until the respective times Contractor has (i) responded to, in the case of response time and (ii) Resolved such Support Request, in the case of Resolution time. "**Resolve**" (including "**Resolved**", "**Resolution**" and correlative capitalized terms) means that, as to any Service Error, Contractor has provided the State the corresponding Service Error correction and the State has confirmed such correction and its acceptance thereof. Contractor will respond to and Resolve all Service Errors within the following times based on the severity of the Service Error:

Support Request Classification	Service Level Metric (Required Response Time)	Service Level Metric (Required Resolution Time)	Service Level Credits (For Failure to Respond to any Support Request Within the Corresponding Response Time)	Service Level Credits (For Failure to Resolve any Support Request Within the Corresponding Required Resolution Time)
Critical Service Error	Two (2) hours	Six (6) hours	Five percent (5%) of the Fees for the month in which the initial Service Level Failure begins and five percent (5%) of such monthly Fees for each additional hour or portion thereof that the corresponding Service Error is not responded to within the required response time.	Five percent (5%) of the Fees for the month in which the initial Service Level Failure begins and five percent (5%) of such monthly Fees for the first additional hour or portion thereof that the corresponding Service Error remains un-Resolved, which amount will thereafter double for each additional one-hour increment.

High Service Error	Two (2) hours	Six (6) hours	Three percent (3%) of the Fees for the month in which the initial Service Level Failure begins and three percent (3%) of such monthly Fees for each additional hour or portion thereof that the corresponding Service Error is not responded to within the required response time.	Three percent (3%) of the Fees for the month in which the initial Service Level Failure begins and three percent (3%) of such monthly Fees for the first additional hour or portion thereof that the corresponding Service Error remains un-Resolved, which amount will thereafter double for each additional one-hour increment.
Medium Service Error	Six (6) hours	Two (2) Business Days	N/A	N/A
Low Service Error	One (1) day	Five (5) Business Days	N/A	N/A

(c)   Escalation. With respect to any Critical Service Error Support Request, until such Support Request is Resolved, Contractor will escalate that Support Request within one hundred and twenty (120) minutes of the receipt of such Support Request by the appropriate Contractor support personnel, including, as applicable, the Contractor Service Manager and Contractor's management or engineering personnel, as appropriate.

5.5   Support Service Level Credits. Failure to achieve any of the Support Service Level Requirements for Critical and High Service Errors will constitute a Service Level Failure for which Contractor will issue to the State the corresponding service credits set forth in **Section 5.4(b)** ("**Service Level Credits**") in accordance with payment terms set forth in the Contract.

5.6   Corrective Action Plan. If two or more Critical Service Errors occur in any thirty (30) day period during (a) the Term or (b) any additional periods during which Contractor does or is required to perform any Hosted Services, Contractor will promptly investigate the root causes of these Service Errors and provide to the State within five (5) Business Days of its receipt of notice of the second such Support Request an analysis of such root causes and a proposed written corrective action plan for the State's review, comment and approval, which, subject to and upon the State's written approval, shall be a part of, and by this reference is incorporated in, the Contract as the parties' corrective action plan (the "**Corrective Action Plan**"). The Corrective Action Plan must include, at a minimum: (a) Contractor's commitment to the State to devote the appropriate time, skilled personnel, systems support and equipment and other resources necessary to Resolve and prevent any further occurrences of the Service Errors giving rise to such Support Requests; (b) a strategy for developing any programming, software updates, fixes, patches, etc. necessary to remedy, and prevent any further occurrences of, such Service Errors; and (c) time frames for implementing the Corrective Action Plan. There will be no additional charge for Contractor's preparation or implementation of the Corrective Action Plan in the time frames and manner set forth therein.

6. Force Majeure.

6.1　Force Majeure Events. Subject to **Section 6.3.**

6.2　State Performance; Termination. In the event of a Force Majeure Event affecting Contractor's performance under the Contract, the State may suspend its performance hereunder until such time as Contractor resumes performance. The State may terminate the Contract by written notice to Contractor if a Force Majeure Event affecting Contractor's performance hereunder continues substantially uninterrupted for a period of five (5) Business Days or more. Unless the State terminates the Contract pursuant to the preceding sentence, any date specifically designated for Contractor's performance under the Contract will automatically be extended for a period up to the duration of the Force Majeure Event.

6.3　Exclusions; Non-suspended Obligations. Notwithstanding the foregoing or any other provisions of the Contract or this Schedule:

    (a)　in no event will any of the following be considered a Force Majeure Event:

        (i)　shutdowns, disruptions or malfunctions of Contractor Systems or any of Contractor's telecommunication or internet services other than as a result of general and widespread internet or telecommunications failures that are not limited to the Contractor Systems; or

        (ii)　the delay or failure of any Contractor Personnel to perform any obligation of Contractor hereunder unless such delay or failure to perform is itself by reason of a Force Majeure Event.

SCHEDULE C
Data Security Requirements

1. Definitions. For purposes of this Schedule, the following terms have the meanings set forth below. All initial capitalized terms in this Schedule that are not defined in this **Section 1** shall have the respective meanings given to them in the Contract.

"**Contractor Security Officer**" has the meaning set forth in **Section 2** of this Schedule.

"**Contractor Systems**" has the meaning set forth in **Section 5** of this Schedule.

"**FedRAMP**" means the Federal Risk and Authorization Management Program, which is a federally approved risk management program that provides a standardized approach for assessing and monitoring the security of cloud products and services.

"**FISMA**" means The Federal Information Security Modernization Act of 2014 (Pub.L. No. 113-283 (Dec. 18, 2014.).

"**Hosted Services**" means the hosting, management and operation of the computing hardware, ancillary equipment, networking, Software, firmware, data, other services (including support services), subcontractors, and related resources for remote electronic access and use by the State and its Authorized Users, including any services and facilities related to disaster recovery obligations.

"**NIST**" means the National Institute of Standards and Technology.

"**PSP**" means the State's IT Policies, Standards and Procedures.

2. Contractor will appoint a Contractor employee to respond to the State's inquiries regarding the security of the Contractor Systems who has sufficient knowledge of the security of the Contractor Systems and the authority to act on behalf of Contractor in matters pertaining thereto ("**Contractor Security Officer**"). The Contractor Security Officer will be considered Key Personnel under the Contract.

3. Protection of the State's Confidential Information. Throughout the Term and at all times in connection with its actual or required performance of the Services, Contractor will:

3.1 maintain FedRAMP authorization for the Hosted Services throughout the Term, and in the event the contractor is unable to maintain FedRAMP authorization, the State, at its sole discretion, may either a) require the Contractor to move the Software and State Data to an alternative Hosting Provider selected and approved by the State at Contractor's sole cost and expense without any increase in Fees, or b) immediately terminate this Contract for cause pursuant to Section 23.1 of the Contract;

3.2 ensure that the Software is securely hosted, supported, administered, and accessed in a data center that resides in the continental United States, and minimally meets Uptime Institute Tier 3 standards (www.uptimeinstitute.com), or its equivalent;

3.3 maintain and enforce an information security program including safety and physical and technical security policies and procedures with respect to its Processing of the State's Confidential Information that comply with the requirements of the State's data security policies as set forth in the Contract**,** and must, at a minimum, remain compliant with FISMA and the NIST Special Publication 800-

53 (most recent version) MOD Controls using minimum control values as established in the applicable SOM PSP's;

3.4 provide technical and organizational safeguards against accidental, unlawful or unauthorized access to or use, destruction, loss, alteration, disclosure, transfer, commingling or processing of such information that ensure a level of security appropriate to the risks presented by the processing of the State's Confidential Information and the nature of such Confidential Information, consistent with best industry practice and standards and applicable standards (including, but not limited to, compliance with NIST and PCI requirements);

3.5 take all reasonable measures to:

(a)   secure and defend all locations, equipment, systems and other materials and facilities employed in connection with the Services against "hackers" and others who may seek, without authorization, to disrupt, damage, modify, access or otherwise use Contractor Systems or the information found therein; and

(b)   prevent (i) the State and its Authorized Users from having access to the data of other customers or such other customer's users of the Services; (ii) the State's Confidential Information from being commingled with or contaminated by the data of other customers or their users of the Services; and (iii) unauthorized access to any of the State's Confidential Information;

3.6 ensure that State Data is encrypted in transit and at rest using FIPS validated AES encryption with a key size of 256 bits or higher;

3.7 ensure the Hosted Services support Identity Federation/Single Sign-on (SSO) capabilities using Security Assertion Markup Language (SAML), Open Authentication (OAuth), or comparable mechanisms;

3.8 ensure the Hosted Services implements NIST compliant multi-factor authentication for privileged/administrative and other identified access; and

3.9 assist the State, at no additional cost, with development, completion and on-going maintenance of a system security plan (SSP) using the State's automated governance, risk and compliance (GRC) platform, which requires Contractor to submit evidence, upon request from the State, in order to validate Contractor's security controls within two weeks of the State's request. On an annual basis, or as otherwise required by the State such as for significant changes, re-assessment of the system's controls will be required to receive and maintain authority to operate (ATO). All identified risks from the SSP will be remediated through a Plan of Action and Milestones (POAM) process with remediation time frames based on the risk level of the identified risk. For all findings associated with the Contractor's solution, at no additional cost, Contractor will be required to create or assist with the creation of State approved POAMs and perform related remediation activities. The State will make any decisions on acceptable risk, Contractor may request risk acceptance, supported by compensating controls, however only the State may formally accept risk.

4. **Unauthorized Access**. Contractor may not access, and shall not permit any access to, State systems, in whole or in part, whether through Contractor's Systems or otherwise, without the State's express prior written authorization. Such authorization may be revoked by the State in writing at any time in its sole discretion. Any access to State systems must be solely in accordance with the Contract and this Schedule, and in no case exceed the scope of the State's authorization pursuant to this **Section 4**. All State-authorized connectivity or attempted connectivity to State systems shall be only through the State's security gateways and firewalls and in compliance with the State's security policies set forth in the Contract as the same may be supplemented or amended by the State and provided to Contractor from time to time.

5. **Contractor Systems**. Contractor will be solely responsible for the information technology infrastructure, including all computers, software, databases, electronic systems (including database management systems) and networks used by or for Contractor in connection with the Services ("**Contractor Systems**") and shall prevent unauthorized access to State systems through the Contractor Systems.

6. **Security Audits**. During the Term, Contractor will:

6.1 maintain complete and accurate records relating to its data protection practices, IT security controls, and the security logs of any of the State's Confidential Information, including any backup, disaster recovery or other policies, practices or procedures relating to the State's Confidential Information and any other information relevant to its compliance with this Schedule;

6.2 upon the State's request, make all such records, appropriate personnel and relevant materials available during normal business hours for inspection and audit by the State or an independent data security expert that is reasonably acceptable to Contractor, provided that the State: (i) gives Contractor at least five (5) Business Days prior notice of any such audit; (ii) undertakes such audit no more than once per calendar year, except for good cause shown; and (iii) conducts or causes to be conducted such audit in a manner designed to minimize disruption of Contractor's normal business operations and that complies with the terms and conditions of all data confidentiality, ownership, privacy, security and restricted use provisions of the Contract. The State may, but is not obligated to, perform such security audits, which shall, at the State's option and request, include penetration and security tests, of any and all Contractor Systems and their housing facilities and operating environments; and

6.3 if requested by the State, provide a copy of Contractor's FedRAMP System Security Plan. The System Security Plan will be recognized as Contractor's Confidential Information.

7. **Nonexclusive Remedy for Security Breach**. Any failure of the Services to meet the requirements of this Schedule with respect to the security of any State Data or other Confidential Information of the State, including any related backup, disaster recovery or other policies, practices or procedures, is a material breach of the Contract for which the State, at its option, may terminate the Contract immediately upon written notice to Contractor without any notice or cure period, and Contractor must promptly reimburse to the State any Fees prepaid by the State prorated to the date of such termination.
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8.   PCI Compliance.

8.1   Contractors that process, transmit, store or affect the security of credit/debit cardholder data, must adhere to the PCI Data Security Standard. The Contractor is responsible for the security of cardholder data in its possession. The data may only be used to assist the State or for other uses specifically authorized by law.

8.2   The Contractor must notify the State's Contract Administrator (within 48 hours of discovery) of any breaches in security where cardholder data has been compromised. In that event, the Contractor must provide full cooperation to the card associations (e.g. Visa, MasterCard, and Discover) and state acquirer representative(s), or a PCI approved third party, to conduct a thorough security review. The Contractor must provide, at the request of the State, the results of such third party security review. The review must validate compliance with the PCI Data Security Standard for protecting cardholder data. At the State's sole discretion, the State may perform its own security review, either by itself or through a PCI approved third party.

8.3   The Contractor is responsible for all costs incurred as the result of the breach. Costs may include, but are not limited to, fines/fees for non-compliance, card reissuance, credit monitoring, and any costs associated with a card association, PCI approved third party, or State initiated security review.

8.4   Without limiting Contractor's obligations of indemnification as further described in this Contract, Contractor must indemnify, defend, and hold harmless the State for any and all claims, including reasonable attorneys' fees, costs, and incidental expenses, which may be suffered by, accrued against, charged to, or recoverable from the State in connection with the breach.

8.5   The Contractor must dispose of cardholder data when it is no longer needed in compliance with PCI DSS policy. The Contractor must continue to treat cardholder data as confidential upon contract termination.

8.6   The Contractor must provide the State's Contract Administrator with an annual Attestation of Compliance (AOC) if or a Report on Compliance (ROC) showing the contractor is in compliance with the PCI Data Security Standard. The Contractor must notify the State's Contract Administrator of all failures to comply with the PCI Data Security Standard.

SCHEDULE D

Disaster Recovery Plan

[Redacted for Security Purposes]

SCHEDULE E
Federal Provisions Addendum

This addendum applies to purchases that will be paid for in whole or in part with funds obtained from the federal government. The provisions below are required and the language is not negotiable. If any provision below conflicts with the State's terms and conditions, including any attachments, schedules, or exhibits to the State's Contract, the provisions below take priority to the extent a provision is required by federal law; otherwise, the order of precedence set forth in the Contract applies. Hyperlinks are provided for convenience only; broken hyperlinks will not relieve Contractor from compliance with the law.

1. Equal Employment Opportunity

If this Contract is a "**federally assisted construction contract**" as defined in 41 CFR Part 60-1.3, and except as otherwise may be provided under 41 CFR Part 60, then during performance of this Contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant

thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided,* **That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.**

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund

occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

2. Davis-Bacon Act (Prevailing Wage)

If this Contract is a **prime construction contracts** in excess of $2,000, the Contractor (and its Subcontractors) must comply with the Davis-Bacon Act (40 USC 3141-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"), and during performance of this Contract the Contractor agrees as follows:

(1) All transactions regarding this contract shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable.
(2) Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.
(3) Additionally, contractors are required to pay wages not less than once a week.

3. Copeland "Anti-Kickback" Act

If this Contract is a contract for construction or repair work in excess of $2,000 where the Davis-Bacon Act applies, the Contractor must comply with the Copeland "Anti-Kickback" Act (40 USC 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"), which prohibits the Contractor and subrecipients from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled, and during performance of this Contract the Contractor agrees as follows:

(1) Contractor. The Contractor shall comply with 18 U.S.C. §874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
(2) Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA or the applicable federal awarding agency may by appropriate instructions require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
(3) Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a Contractor and Subcontractor as provided in 29 C.F.R. § 5.12.

4. Contract Work Hours and Safety Standards Act

If the Contract is **in excess of $100,000** and **involves the employment of mechanics or laborers**, the Contractor must comply with 40 USC 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5), as applicable, and during performance of this Contract the Contractor agrees as follows:

(1) Overtime requirements. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or

mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) <u>Violation; liability for unpaid wages; liquidated damages</u>. In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) <u>Withholding for unpaid wages and liquidated damages.</u> The State shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) <u>Subcontracts</u>. The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

5. Rights to Inventions Made Under a Contract or Agreement

If the Contract is funded by a federal "funding agreement" as defined under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

6. Clean Air Act and the Federal Water Pollution Control Act

If this Contract is **in excess of $150,000,** the Contractor must comply with all applicable standards, orders, and regulations issued under the Clean Air Act (42 USC 7401-7671q) and the Federal Water Pollution Control Act (33 USC 1251-1387), and during performance of this Contract the Contractor agrees as follows:

Clean Air Act

1. The Contractor agrees to comply with all applicable

standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.

3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

Federal Water Pollution Control Act

1. The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.

3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

7. Debarment and Suspension

A "contract award" (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (51 FR 6370; February 21, 1986) and 12689 (54 FR 34131; August 18, 1989), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(1) This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Contractor is required to verify that none of the Contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by the State. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

8. Byrd Anti-Lobbying Amendment

Contractors who apply or bid for an award of **$100,000 or more** shall file the required certification in Exhibit 1 – Byrd Anti-Lobbying Certification below. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

9. Procurement of Recovered Materials

Under 2 CFR 200.322, Contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act.

(1) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
  1. Competitively within a timeframe providing for compliance with the contract performance schedule;
  2. Meeting contract performance requirements; or
  3. At a reasonable price.

(2) Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive- procurement-guideline-cpg-program.

(3) The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

10. Additional FEMA Contract Provisions.

The following provisions apply to purchases that will be paid for in whole or in part with funds obtained from the Federal Emergency Management Agency (FEMA):

(1) <u>Access to Records</u>. The following access to records requirements apply to this contract:

    a. **The Contractor agrees to provide the State, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.**

    b. **The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.**

    c. **The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.**

    d. **In compliance with the Disaster Recovery Act of 2018, the State and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.**

(2) <u>Changes.</u>

    See the provisions regarding modifications or change notice in the Contract Terms.

(3) <u>DHS Seal, Logo, And Flags</u>

    The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

(4) <u>Compliance with Federal Law, Regulations, and Executive Orders</u>

    This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

(5) <u>No Obligation by Federal Government</u>

    The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the State, Contractor, or any other party pertaining to any matter resulting from the Contract."

(6) <u>Program Fraud and False or Fraudulent Statements or Related Acts</u>

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative

Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

Exhibit 1 to Schedule E
Byrd Anti-Lobbying Certification

Contractor must complete this certification if the purchase will be paid for in whole or in part with funds obtained from the federal government and the purchase is greater than $100,000.

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor,_____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

_____

Signature of Contractor's Authorized Official

_____

Name and Title of Contractor's Authorized Official

_____

Date