Item 11 – Upgrade of Halff Database Platform

District Staff reached out to Halff Associates inquiring about inserting a Well Assistance database into the existing database platform. This is essentially a database within a database. The Well Assistance Plan prescribes the database be used for all information related to future mitigation data collection. The cost of building the Well Assistance Plan database is estimated at \$12,500.

Option 1

- Build/deploy Well Assistance database into the existing District platform -\$12,500
- If Option 1 is chosen, when the District database platform becomes unsupported, the Well Assistance database cannot be migrated into the new Halff platform. It will need to be built a second time

Our current Halff platform was installed in early 2013 and has not been updated. The current platform is still viable but will at some point become unsupported. We can update the current platform for \$62,052 less a 20% discount. The discount is applied by Halff because it makes it easier for them to service our database. We are one of two remaining districts with the original database platform. Halff currently serves 19 districts database needs.

Option 2

- Upgrade/launch new platform for the District database \$49,641
- Upgrade includes many data fields needed but not currently available in our existing database such as well construction, screened intervals, virtual cutaway of the well bore, etc.

If Options 1 & 2 are chosen separately, it will be at a cost of \$62,191. Halff Associates offers the option to build /deploy both Options 1 & 2 simultaneously.

Option 3

• Upgrade Halff platform, build Well Assistance database, deploy both - \$55,913

It is important to get any updates in place as soon as possible for Well Assistance information can be entered in real time.

It is the recommendation by the General Manager to allow Halff Associates upgrade the current District database to the most recent platform(s), build a Well Assistance database, and deploy both simultaneously during FY2022.



Brazos Valley GCD Database Enhancements Task Order Authorization No. 33 July 18, 2022

Scope of Work:	 Create a new way to Add/Edit Well Mitigations to existing database application Add a new Add/Edit Mitigation Data section to the well Add Investigation Phase section Add Mitigation Phase section Add New Well Information Section Add new Fields to Query Tool Add new layers to web map to show mitigations by status
Deliverables:	1. Well Mitigation Tracking
Items Furnished by BVGCD:	1. N/A



Fees:	Total Fee: \$12,500
	This is a lump sum fee contract and will be billed monthly based on percent complete. Direct costs are included in this fee summary.

Halff Associates is performing the services above under the terms and conditions described in the **Agreement For Professional Services On A Task Order Basis**, dated November 26, 2012, between Halff Associates and the Brazos Valley Groundwater Conservation District. Halff Associates will bill the above described services under AVO 29239.

Submitted

Approved

Halff Associates, Inc.

Brazos Valley GCD



Brazos Valley GCD Database Enhancements Task Order Authorization No. 33 July 18, 2022

Saana of Warks	1. Migrate existing Groundwater Application to current Halff
Scope of Work:	GMS framework
	a. New Capabilities
	i. Fully mobile friendly modern UI for database
	entry
	ii. Interactive production explorer widget on
	dashboard
	iii. Filtering and grouping by individual fields on
	all search screens (wells, owners, permits etc)
	iv. Links to TWDB scans and reports for wells
	v. Unlimited notes for wells, owners, permits
	etc
	vi. Unlimited document attachment and storage
	for wells, permits etc
	vii. Mobile field inspections
	viii. Water Quality reporting
	ix. Well completion attributes and diagram
	x. Unlimited contact methods for owners and
	drillers
	xi. Dedicated driller module with licensing
	information
	xii. Lookup maintenance tool so the district can
	maintain their own values in various drop
	down lists (ie: well use types, well status etc)
	xiii. Link from map to well edit screen
	b. Migration Tasks
	i. Migrate all data to new schema
	ii. Update public map
	iii. Update Secure Map
	iv. Migrate Mobile Water Level map
	v. Create well owner login with production,
	water level and meter reading self reporting
	vi. Add permit renewal system to dashboard
	vii. Add water level default values for air pump
	depth and measurement point to wells
	viii. Update water level entry to support default
	values from wells and air gauge maintenance
	ix. Add meter readings module, independent
	from production values



	Х.	Update permits to support authorized owner
	Λ.	logins and QuickBooks invoice type
	xi.	Develop updated versions of production,
		permit, production fee and water level reports
	xii.	Migrate QuickBooks system to support new
		database schema
	xiii.	Add air gauge maintenance with calibration
		dates
	xiv.	Migrate TCEQ reports
	XV.	Add additional layers to well completion tool
		and add link from map
Deliverables:	1. New GMS A	pplication Framework
Deliverables:		
Items Enumished by	1. N/A	
Items Furnished by		
BVGCD:		



Fees:	The estimated cost for the migration and application updates is \$62,052. However, since this new framework will help Halff be better able to support you (with an updated database and frameworks), we would discount approximately 20% to an adjusted cost of \$49,641.
	Total Fee: \$49,641
	This is a lump sum fee contract and will be billed monthly based on percent complete. Direct costs are included in this fee summary.

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Submitted

Approved

Halff Associates, Inc.

Brazos Valley GCD

David Coyer_____

Title: Director of Software Development____

Title:

Date: July 18, 2022

Date: _____



Brazos Valley GCD Database Enhancements Task Order Authorization No. 33 July 18, 2022

Scope of Work:	1. Migrate existing Groundwater Application to current Halff
	GMS framework
	a. New Capabilities
	i. Fully mobile friendly modern UI for database
	entry
	ii. Interactive production explorer widget on dashboard
	iii. Filtering and grouping by individual fields on all search screens (wells, owners, permits etc)
	iv. Links to TWDB scans and reports for wells
	v. Unlimited notes for wells, owners, permits
	etc
	vi. Unlimited document attachment and storage
	for wells, permits etc
	vii. Mobile field inspections
	viii. Water Quality reporting
	ix. Well completion attributes and diagram
	x. Unlimited contact methods for owners and
	drillers
	xi. Dedicated driller module with licensing information
	xii. Lookup maintenance tool so the district can maintain their own values in various drop
	down lists (ie: well use types, well status etc)
	xiii. Link from map to well edit screen
	b. Migration Tasks
	i. Migrate all data to new schema
	ii. Update public map
	iii. Update Secure Map
	iv. Migrate Mobile Water Level map
	v. Create well owner login with production,
	water level and meter reading self reporting
	vi. Add permit renewal system to dashboard
	vii. Add water level default values for air pump
	depth and measurement point to wells
	viii. Update water level entry to support default
	values from wells and air gauge maintenance
	ix. Add meter readings module, independent
	from production values



	x. Update permits to support authorized owner
	logins and QuickBooks invoice type
	xi. Develop updated versions of production, permit, production fee and water level reports
	xii. Migrate QuickBooks system to support new database schema
	xiii. Add air gauge maintenance with calibration dates
	xiv. Migrate TCEQ reports
	xv. Add additional layers to well completion tool and add link from map
	c. Create a new way to Add/Edit Well Mitigations
Deliverables:	1. New GMS Application Framework
Items Furnished by BVGCD :	1. N/A



Fees:	The estimated cost for the migration and application updates is \$69,892. However, since this new framework will help Halff be better able to support you (with an updated database and frameworks), we would discount approximately 20% to an adjusted cost of \$49,641.
	Total Fee: \$55913
	This is a lump sum fee contract and will be billed monthly based on percent complete. Direct costs are included in this fee summary.

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Halff Associates, Inc.

Brazos Valley GCD

David Coyer_____

Title: Director of Software Development____

Title:

Date: July 18, 2022

Date: _____