



MEMORANDUM

TO: Members, Select Committee on Capital Financing & Investments  
Members, Joint Appropriations Committee

FROM: Dawn Williams, Deputy State Treasurer

DATE: February 10, 2023

SUBJECT: Workflow Automation Report, February 2023  
LSO Report ID 1481

Pursuant to 2022 Wyoming Session Laws, Chapter 51, Section 2, Section 004, Footnote 9, I provide the following information:

- (i) *The status of and any expenditure regarding project plan milestones and deliverables achieved or missed for accounting workflow automation.*

For the last two years, the State Treasurer's Office has been aggressively pursuing modernization and upgrade of its investment accounting software. In December 2021 we contracted with Broadridge to begin the process. We aligned our transition to the new system to coincide with the beginning of the new fiscal year and biennium, July 1, 2022. The upgrade is occurring in three phases. In Phase I we established a new chart of accounts, manager and custodial data feeds and generally laid the groundwork for the new system. During Phase II we are fine-tuning data aggregation and reconciliation processes, creating the directives module and refining the distributions process. We anticipate the third phase to include upgrades and services that we become aware of during implementation of Phases I and II that will bring value to the overall success of the project.

Phase II is underway:

- Enhancements to the monthly income distribution process are out of development, and the changes are being tested by the vendor. We requested a minor revision to this enhancement causing the task dates to move slightly, but there was no increase in the cost estimate to include this revision.
- We are continuing the collection of the data aggregation from the individual managers. We learned a few things from the first round and have applied the changes to the second set of requests and seem to be getting better cooperation. As we load data from each individual manager, the reconciliation back to the monthly custodian data will be configured.

The detailed task plan for Phase II of the Workflow Initiative is attached (Attachment A).

Expenditures to date: \$441,500



**CURTIS E. MEIER, JR.**  
WYOMING STATE TREASURER

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DAWN A. WILLIAMS, DEPUTY STATE TREASURER

- (ii) *The status of and any expenditure regarding project plan milestones and deliverables achieved or missed for the order management system (OMS).*

On February 1, 2022 the State Treasurer's Office entered into a contract with Bloomberg Finance to provide an order management system (OMS). An OMS is a software system that facilitates and manages the execution of trade orders. This system will interface with the accounting software. The OMS implementation project is complete.

Expenditures to date: \$468,405.86

- (iii) *The status of and any expenditure regarding project plan milestones and deliverables achieved or missed for contractual accounting assistance.*

At the end of January 2022, the Office retained KPMG to assist with reconciling investment accounts and to provide observations and recommendations for improving our processes and procedures related to investment accounting. KPMG completed the requirements of that contract. We have retained KPMG through June 30, 2023 to assist us any other issues we encounter that will require additional support. Currently, there are no projects in process.

Expenditures to date: \$297,585.25

Cc: Treasurer Meier  
Investment Funds Committee

# ATTACHMENT A

## Broadridge/QED Workflow Initiative Project - Phase 2

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
<b>Remaining Deliverables from Phase 1</b>							
Investment Earnings for Income and GNL (previously: T064)	WYSTO, Broadridge		Phase 1	03/10/2023	In Progress	99%	STO, Broadridge testing and finalizing
Investment Earnings by Manager (previously: Colorful T064)	WYSTO, Broadridge		Phase 1	03/10/2023	In Progress	99%	STO, Broadridge testing and finalizing
Investment Earnings by Pool, Type (previously: At A Glance)	WYSTO, Broadridge		Phase 1	03/10/2023	In Progress	99%	STO, Broadridge testing and finalizing
<b>Distributions Redirections and JV Interface</b>							
Redirection of units resource gathering	Broadridge	8	10/03/2022	10/04/2022	Complete	100%	
Create the Business Requirement Documents	Broadridge	32	10/05/2022	10/14/2022	Complete	100%	
Client approval of Business Requirements Documents	WYSTO		11/09/2022	11/09/2022	Complete	100%	
Development review of BRD	Broadridge	5	11/16/2022	11/17/2022	Complete	100%	
Coding of Table and Runtime options.	Broadridge	120	11/17/2022	12/29/2022	Complete	100%	
QA testing	Broadridge	40	12/29/2022	02/14/2023	In Progress	82%	Task dates were extended to include WYSTO change request (no additional cost/charge).
QA coding changes	Broadridge	40	01/12/2023	02/14/2023	In Progress	95%	
Deployment plan	Broadridge	24	02/15/2023	02/15/2023	Future task		
Deploy patch in UAT	Broadridge	1	02/16/2023	02/17/2023	Future task		
UAT testing	WYSTO		02/20/2023	03/03/2023	Future task		
Deploy patch in Production	Broadridge	1	03/10/2023	03/13/2023	Future task		
<b>Daily Balancing, Undistributed Income Report/Process</b>							
Resource gathering	Broadridge	25	02/17/2023	03/07/2023	Future task		
Create Business Requirements Document	Broadridge	24	03/24/2023	03/31/2023	Future task		
Establish success criteria for QA and UAT testing	WYSTO		03/06/2023	03/09/2023	Future task		
Create test plan & test cases for QA & UAT testing	WYSTO		03/06/2023	03/09/2023	Future task		
Client approval of Business Requirements Document	WYSTO		03/31/2023	04/03/2023	Future task		
Development review of Business Requirements Document	Broadridge	4	04/04/2023	04/04/2023	Future task		
Coding QED Balancing	Broadridge	48	04/05/2023	04/20/2023	Future task		
QA testing	Broadridge	16	04/21/2023	04/26/2023	Future task		
QA coding changes	Broadridge	8	04/27/2023	04/28/2023	Future task		
Move report to UAT Environment	Broadridge	1	05/01/2023	05/01/2023	Future task		
UAT Testing in accordance with the test plan	WYSTO		05/01/2023	05/08/2023	Future task		
Approval of QED Balancing Report/Process Replacement	WYSTO		05/08/2023	05/08/2023	Future task		
Move report to Production Environment	Broadridge	1	05/08/2023	05/08/2023	Future task		
<b>Investment Balance Sheet Report/Process</b>							
Resource gathering	Broadridge	25	02/17/2023	03/01/2023	Future task		
Create Business Requirements Document	Broadridge	20	03/02/2023	03/08/2023	Future task		
Establish success criteria for QA and UAT testing	WYSTO		02/28/2023	03/03/2023	Future task		
Create test plan & test cases for QA & UAT testing	WYSTO		02/28/2023	03/03/2023	Future task		
Client approval of Business Requirements Document	WYSTO		03/08/2023	03/08/2023	Future task		
Development review of Business Requirements Document	Broadridge	4	03/09/2023	03/09/2023	Future task		
Table for controlled disbursement from Wells Fargo feed	Broadridge	8	03/10/2023	03/13/2023	Future task		
Procedure/script to upload Controlled Disbursement data	Broadridge	8	03/14/2023	03/15/2023	Future task		
Coding Investment Balance Sheet	Broadridge	32	03/16/2023	03/27/2023	Future task		
QA testing	Broadridge	16	03/28/2023	03/31/2023	Future task		
QA coding changes	Broadridge	8	04/03/2023	04/04/2023	Future task		
Move report to UAT Environment	Broadridge	1	04/05/2023	04/05/2023	Future task		
UAT Testing in accordance with the test plan	WYSTO		04/05/2023	04/12/2023	Future task		

**Broadridge/QED Workflow Initiative Project - Phase 2**

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
Approval of Investment Balance Sheet Replacement	WYSTO		04/12/2023	04/13/2023	Future task		
Move report to Production Environment	Broadridge	1	04/13/2023	04/13/2023	Future task		
<b>Ownership (PSA) Report/Process</b>							
Ownership (PSA) resource gathering	Broadridge	4	03/09/2023	03/09/2023	Future task		
Create Business Requirements Document	Broadridge	24	03/10/2023	03/17/2023	Future task		
Establish success criteria for QA and UAT testing	WYSTO		03/17/2023	03/24/2023	Future task		
Create test plan & test cases for QA & UAT testing	WYSTO		03/24/2023	03/31/2023	Future task		
Client approval of Business Requirements Document	WYSTO		03/31/2023	03/31/2023	Future task		
Development review of Business Requirements Document	Broadridge	6	04/03/2023	04/04/2023	Future task		
Create table/process for JPM ownership percentages data	Broadridge	8	04/03/2023	04/04/2023	Future task		
Procedure/script to upload JPM ownership percentages	Broadridge	8	04/04/2023	04/06/2023	Future task		
Coding Ownership percentages	Broadridge	60	04/04/2023	04/25/2023	Future task		
QA Testing	Broadridge	24	04/25/2023	05/03/2023	Future task		
QA coding Changes	Broadridge	12	05/03/2023	05/08/2023	Future task		
Move report to UAT Environment	Broadridge	1	05/08/2023	05/08/2023	Future task		
UAT Testing in accordance with the test plan	WYSTO		05/08/2023	05/22/2023	Future task		
Approval of Ownership (PSA) Report/Process Replacement	WYSTO		05/22/2023	05/22/2023	Future task		
Move report into Production Environment	Broadridge	1	05/22/2023	05/22/2023	Future task		
<b>BIA General Ledger</b>							
Setup and Config hard close process	Broadridge	4	02/17/2023	02/21/2023	Future task		
Select begin date for hard close process through end date.	WYSTO		02/21/2023	02/28/2023	Future task		
General Ledger resource gathering	WYSTO, Broadridge	8	02/28/2023	03/06/2023	Future task		
Create the Business Requirements Document	Broadridge	24	03/06/2023	03/22/2023	Future task		
Establish success criteria for QA and UAT testing	WYSTO		03/22/2023	03/29/2023	Future task		
Create test plan & test cases for QA & UAT testing	WYSTO		03/29/2023	04/05/2023	Future task		
Client approval of Business Requirements Document	WYSTO		04/05/2023	04/07/2023	Future task		
Define Chart of accounts	WYSTO		04/07/2023	04/12/2023	Future task		
Establish/configure general ledger reference tables	Broadridge	16	04/12/2023	04/24/2023	Future task		
Custom config and modification of GL module	Broadridge	8	04/24/2023	04/28/2023	Future task		
Client complete Debit/Credit mapping of transaction types	WYSTO		04/28/2023	05/05/2023	Future task		
Convert client debit/credit to cross-mappings tables by fund	Broadridge	80	05/05/2023	06/30/2023	Future task		
Perform QA testing	Broadridge	40	06/30/2023	07/28/2023	Future task		
Training on the hard close and general ledger processes	Broadridge	1	07/28/2023	07/31/2023	Future task		
Move to UAT Environment	Broadridge	4	07/31/2023	08/09/2023	Future task		
Perform UAT Testing	WYSTO		08/09/2023	08/23/2023	Future task		
Approval of BIA General Ledger for Manager's Recon	WYSTO		08/23/2023	08/23/2023	Future task		
<b>Data Aggregation and Reconciliation - Part 1 (Custodian data)</b>							
Account Recon from Manager List Provided by WYSTO	Broadridge	10	09/06/2022	09/08/2022	Complete	100%	
Resolve exceptions from account recon and provide data	WYSTO		09/30/2022	09/30/2022	Complete	100%	
Cash Key Setup	Broadridge	10	09/30/2022	10/04/2022	Complete	100%	
Derivatives Data Source (TBD Dependent on Data Source)	WYSTO		10/04/2022	10/31/2022	Complete	100%	
<b>Data Aggregation and Reconciliation - Part 2 (Manager data)</b>							
Draft Letter of Authorization, Coordinate with Broadridge	WYSTO, Broadridge	16	09/12/2022	09/16/2022	Complete	100%	
Readiness/Timing for Letter of Authorization to Managers	WYSTO	40	09/19/2022	10/31/2022	Complete	100%	

**Broadridge/QED Workflow Initiative Project - Phase 2**

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
<b>Manager Data Agg- Grosvenor A</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	12/20/2022	TBD	In Progress	10%	Actively working with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Goldman Sachs</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	12/20/2022	TBD	In Progress	18%	Actively working with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Global Evolution</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	12/20/2022	TBD	In Progress	5%	Actively working with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			

**Broadridge/QED Workflow Initiative Project - Phase 2**

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- JPM MBS</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	12/20/2022	TBD	In Progress	5%	Pending WYSTO agreement with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Metlife</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	12/20/2022	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Bloomberg (includes 12 manager accounts)</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	12/20/2022	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			

**Broadridge/QED Workflow Initiative Project - Phase 2**

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- JPM Extended Cash</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	12/20/2022	TBD	In Progress	0%	Pending WYSTO agreement with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Accel-KKR</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Access Venture Partners</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			



**Broadridge/QED Workflow Initiative Project - Phase 2**

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Arrowstreet International</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Atalaya</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Barings</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			



**Broadridge/QED Workflow Initiative Project - Phase 2**

<b>Description</b>	<b>Responsible</b>	<b>Contract Hours</b>	<b>Start Date</b>	<b>End Date</b>	<b>Status</b>	<b>% Complete</b>	<b>Notes</b>
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- BlackRock (PE)</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- BlackRock (SmallCap)</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Cheyenne Capital</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			

**Broadridge/QED Workflow Initiative Project - Phase 2**

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Clarion Lion</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Cohen &amp; Steers</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Dragoner</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			

**Broadridge/QED Workflow Initiative Project - Phase 2**

<b>Description</b>	<b>Responsible</b>	<b>Contract Hours</b>	<b>Start Date</b>	<b>End Date</b>	<b>Status</b>	<b>% Complete</b>	<b>Notes</b>
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Eaton Vance</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Finisterre</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- GTCR</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			

**Broadridge/QED Workflow Initiative Project - Phase 2**

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Hamilton Lane Nowood</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Harding Loevner</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/27/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Harvest</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/30/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			

**Broadridge/QED Workflow Initiative Project - Phase 2**

<b>Description</b>	<b>Responsible</b>	<b>Contract Hours</b>	<b>Start Date</b>	<b>End Date</b>	<b>Status</b>	<b>% Complete</b>	<b>Notes</b>
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- KKR</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/30/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- M&amp;G</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/30/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Manager Data Agg- Macquarie</b>							
Confirmation, Agreement of Common Format Approach	Broadridge, WYSTO	11	01/30/2023	TBD	In Progress	0%	Initial communications with manager
Setup Locked Manager Directory	Broadridge	1	TBD	TBD			
Obtain and Whitelist IP Address Range for File Transfer	Broadridge	2	TBD	TBD			
Sharefile Setup/Manager Test File Receipt	Broadridge	1	TBD	TBD			
Manager Test File Receipt	Broadridge		TBD	TBD			

**Broadridge/QED Workflow Initiative Project - Phase 2**

Description	Responsible	Contract Hours	Start Date	End Date	Status	% Complete	Notes
Setup manager in mySQL dataagg.banks	Broadridge	2	TBD	TBD			
File Movement Setup/Testing/Archiving inbound	Broadridge	5	TBD	TBD			
Data Aggregation Analysis/Validation	Broadridge	15	TBD	TBD			
Create Cross Mapping	Broadridge	5	TBD	TBD			
Create Initial Balance Forward File	Broadridge	5	TBD	TBD			
Setup Handlers in MySQL (Position, Transaction, Sec Master)	Broadridge	5	TBD	TBD			
QA Testing	Broadridge	10	TBD	TBD			
Manager Data Load	Broadridge	5	TBD	TBD			
Manager Signoff	WYSTO		TBD	TBD			
<b>Reconciliation: Configure Pair Off Tool (after Manager Data Agg tasks above)</b>							
List of data elements for reconciliation	WYSTO		TBD	TBD			
Create reconciliation templates	Broadridge	10	TBD	TBD			
Auto creation of reconciliation QA	Broadridge	30	TBD	TBD			
QA testing	Broadridge	30	TBD	TBD			
Auto creation of reconciliation UAT	Broadridge	15	TBD	TBD			
UAT Testing	WYSTO		TBD	TBD			
<b>Directives IPAS Module</b> <span style="float: right;"><i>Pending software licensing agreement.</i></span>							
Start process for QA, UAT, and Production iPAS environment	Broadridge	1	TBD	TBD			
Setup QA iPAS environment	Broadridge	20	TBD	TBD			
Setup UAT iPAS environment	Broadridge	20	TBD	TBD			
Setup Production iPAS environment	Broadridge	20	TBD	TBD			
Resource gathering	Broadridge	16	TBD	TBD			
Create the Business Requirements Document	Broadridge	24	TBD	TBD			
Client approval of Business Requirements Document	WYSTO		TBD	TBD			
Development review of BRD	Broadridge	6	TBD	TBD			
Provide requested branding titles/logos	WYSTO		TBD	TBD			
Purchase web certification	WYSTO		TBD	TBD			
Development Effort	Broadridge	350	TBD	TBD			
QA testing	Broadridge	40	TBD	TBD			
QA code changes	Broadridge	80	TBD	TBD			
Build deployment plan	Broadridge	24	TBD	TBD			
Move to UAT	Broadridge	8	TBD	TBD			
UAT testing	WYSTO		TBD	TBD			
Move to Production	Broadridge	8	TBD	TBD			