ATTACHMENT J

LOCKBOX ICD & DOCUMENT AND ENVELOPE DESIGN SPECS

The Bank of New York Mellon Recommended Retail Lockbox Envelope Specifications

All dimensions in INCHES Modified 13-Nov-08

		Post Office		Opex 150	
	Ideal	Max.	Min.	Max.	Min.
Dimensions					
Length	**7**	11.5	5	9.5	6
Height	**3.5**	6.125	3.5	4.4	3.5
Thickness	**Range**	0.25	0.007	Var. exceedg .001" will outsort	
Aspect Ratio					
Length to height ratio of envelope	**2**	2.5	1.3	3	1
Envelope Material***					
Paper weight (pound bond)	**24**	75	16	70	18
Paper color (% Reflectance)	**White (80%)**	100%	50%	100%	50%
Envelope Construction - Seam Design Side	~~**Diagonal**~~				
Address Block / Window Location					
From right edge of envelope	**1**		0.5		1.5
Start of address window, measured from bottom edge of env.	**0.75**		0.625		1
Top of address window, measured from bottom edge of env.	**2.75**	2.75		2.75	
Distance of window patch material from all edges of env.	**0.25**				0.125
Barcode Location for Non-Window Env.					
From bottom edge of env. (up)	**0.25**	0.4375	0.1875		
From lower right edge of env. (in)	**Range**	4.25	0.3		
First Bar of ZIP+4 barcode between:	**Range**	4.25	3.5		
Barcode & Address Location for Window Env.+ (measured from window edge)					
Address clearance (through full range of insert shift)	**0.25**		0.125		
Barcode clearance (above and below)	**0.125**		0.04		
Barcode clearance (left & right sides)	**0.125**		0.125		
Barcode Size					
Full Bar Height	**0.125**	0.135	0.115		
Half Bar Height	**0.05**	0.06	0.04		
Bar Width (Both Bars)	**0.02**	0.025	0.015		
Bar Pitch (Bars per inch)	**22**	24	20		
Address Format****					
Uniform Left Margin	**Yes**				
Two-letter State Abbreviation	**Yes**				
ZIP Code plus 4	**Yes**				
Address Font Style**					
Regular San Serif	**Yes**				
Type Size (points)	**12**	18	8		
Line Spacing (points)	**Range**	16	2		
Address & Barcode Color***					
Ink	**Black**				
Background	**White**				
Return Address Location (Window)					
From left edge of envelope	**1.5**		0.5		1.5
Start of return address from bottom edge of envelope (up)	**2.75**		2.75		
From top edge of envelope (down)	**0.25**		0.25		1
FIM (Facing Identification Mark)					
Type	**FIM A**	FIM C	FIM A		
FIM Location					
From top right of envelope to most left bar (in)	**2.5**	3	1.875		
From top of envelope (down)	**0.625**	0.75	0.125		
FIM Size					
Bar Height	**0.625**	0.75	0.5		
Bar Width	**0.03125**	0.03925	0.02325		
Instructions on back of envelope to include:					
"Do **NOT** fold check, staple or paperclip contents."	**Yes**				

* If envelope is longer than 6" or higher than 4.25", minimum thickness is 0.009".

** Unacceptable Type Styles include: Light, Bold, Underline, Extended, Condensed, Italicized, Stylized and Script. Avoid using dot matrix characters and "flat-top" characters (especially for the numerals 3, 6 and 9).
*** In cases where the document is used to display the address and POSTNET barcode, avoid background graphics on docs. Do not use fluorescent or phosphorescent ink or paper.
**** It is highly recommended that uppercase characters be used. Avoid using prompting words, such as "To:", in address.
***** Envelope material should be uncoated white wove stock, preferably no recycled paper. High stiffness is desirable. Low paper porosity is preferred. Dark colored paper should be avoided, because of low reflectance.
+ POSTNET barcode above address is preferred, below address is acceptable.

Envelope Construction

DISREGARD

~~A. Side seam envelope construction may allow checks to become trapped under seam, which may result in failed extraction. The failed extraction will significantly increase manual processing of "reunites". Trapped contents may also cause the machine to jam.~~ ~~**A diagonal seam design is recommended.**~~ ~~Checks cannot be trapped using this construction type.~~

B. All seams, including closing flap, need to be glued to fully seal. Paper edges not fully glued can bend / fold, thereby, increasing the likelihood of paper jams or other extraction problems. Exposed glue on the inside of the envelope is unacceptable. Particular attention should be given to the glue location of the closing flap. If poorly closed, the glue should not be exposed to inside contents.

C. Envelope should be large enough to fit a 6" personal check without having to be inserted under side seam. This accomplishes two things. One, reduction of possible "reunites" from wedged in doc and check, and two, reduction of possible folding of checks.

D. Damage to address windows from post office machine handling can create problems for the Opex 150 extraction procedure. The likelihood of damage to the address window, resulting from being to close to the contact area of the sorting mechanism (post office) or opening mechanism (Opex 150), can be reduced by locating the window closer to the center of the envelope.

E. Uncovered Address Windows: Size should be minimized. Large uncovered windows create structural weakness and allow for "snagging" damage. Maximize use of uncovered window by printing the return address on the envelope, and allow for only the name of the company to show through the window (this still helps insure document orientation).

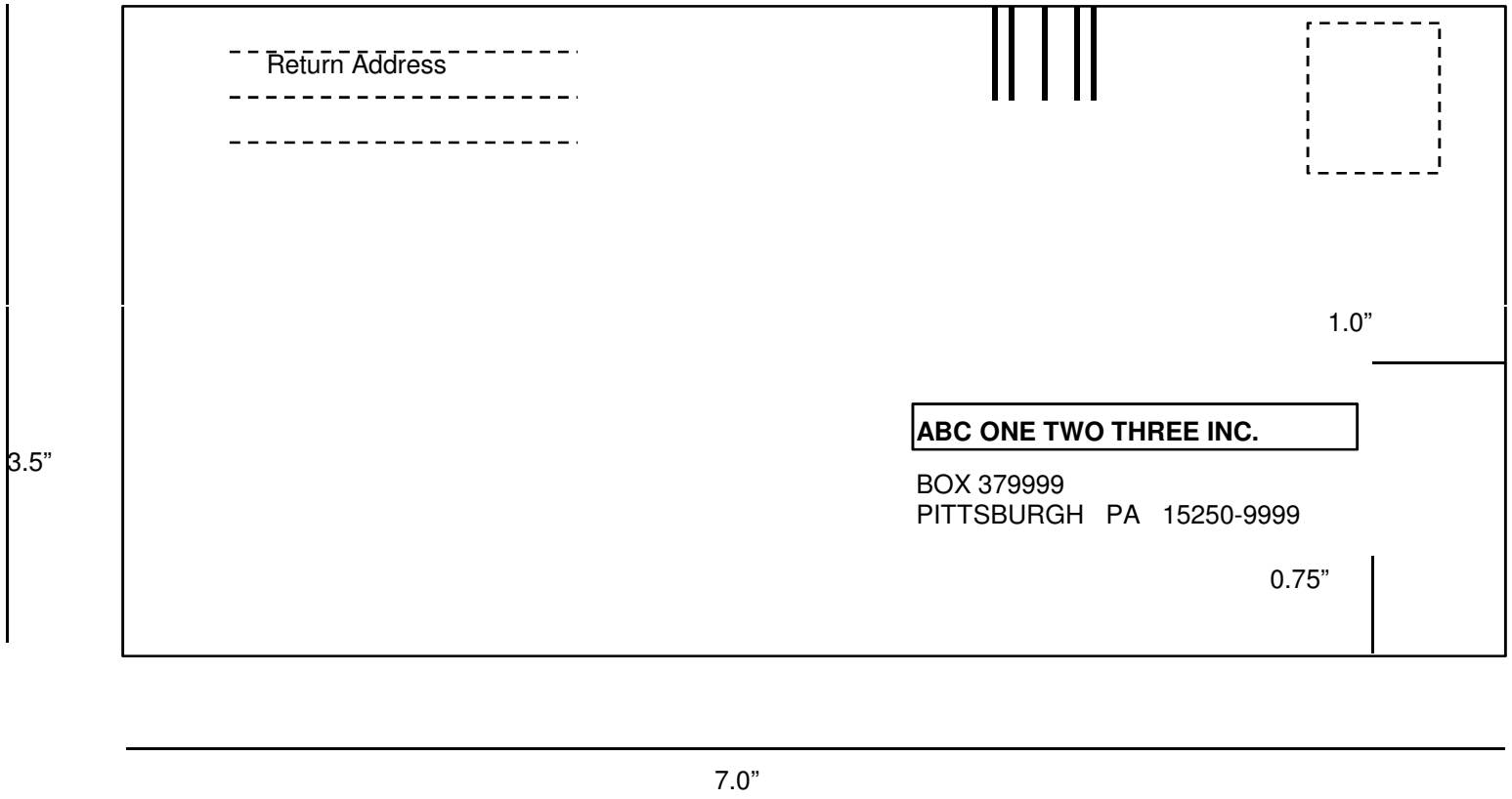
F. Covered Windows: The covering material should never touch any inside edge of the envelope. This can cause slivers to occur during Opex 150 opening, causing machine jams and processing delays. Another concern is the tendency for the covering material to retain static electricity inside the envelope. This can cause contents to stick to the window and result in reunites, increasing manual exception processing of items. Also, the clarity of the covering material is important for barcode reading through the window. Opaque colors are not recommended, due to possible barcode misreads.

G. It is highly recommended that FIM (Facing Identification Marks) be used in conjunction with a POSTNET barcode. Envelopes with FIM and barcode will provide the fastest workflow through the postal sorting system. Those without either, may reject off first-level postal sorting equipment and require further processing steps through an OCR machine, etc.

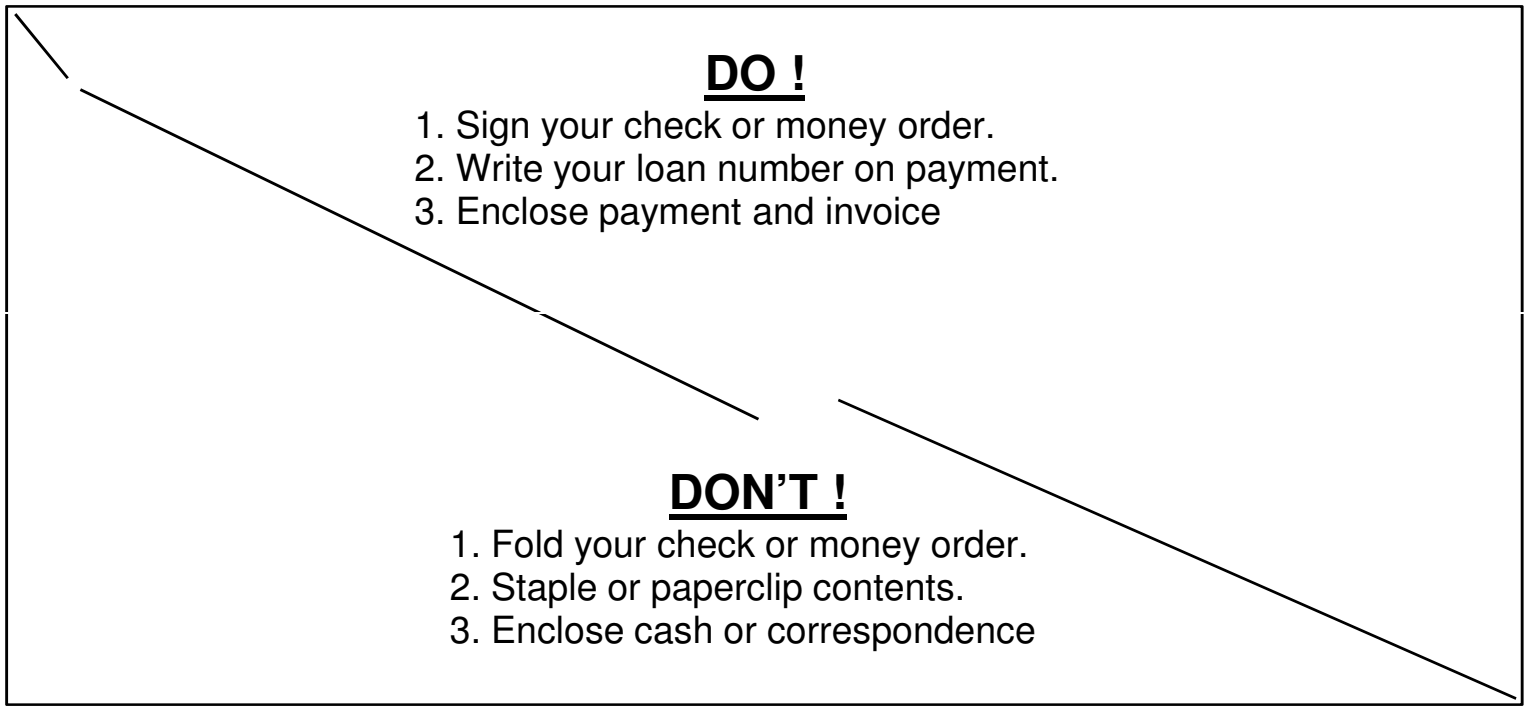
H. Orientation marks on the edges of envelopes are recommended to assist in proper orientation during mail preparation into the Opex 150 feed. Misoriented input to the Opex 150 will at best slow down machine processing speed, and at worst, cause output rejects, thereby increasing manual handling.

I. Do not use cellophane for envelope window.

FRONT OF ENVELOPE



BACK OF ENVELOPE (Closed)



The Bank of New York Mellon Recommended Retail Lockbox Document Specifications

All dimensions in INCHES

	Ideal	Max.	Min.
Document Dimensions			
Length	**6.875**	8.75	5.5
Height	**3.375**	4.25	2.375
Thickness	**0.006**	0.007	
Doc clearance around all interior of envelope (least)	**0.25**		0.125
Aspect Ratio			
Length to height ratio of document	**2**	3	1
Document Material****			
Paper weight (pound bond)	**24**	70	20
Paper color (% Reflectance)	**White (80%)**	100%	70%
Scan Band			
Start of scan line from either bottom (or top) edge of doc	**0.375**		0.25
Height of scan band from either bottom (or top) edge of doc	**0.75**		0.5
Print location past either end of scanline, within scan band	**None**	None	0.375
Perforation away from edges of the scan band*	**Yes**		
Scanline location	**Center**	Avoid location where scanline cannot be read completely due to 'dog ears'	
Scan Line*****			
Print Type***	**OCRA**	(numeric) - Laser Printed	
Ink**	**Black**		
Type Size (cpi - characters per inch)	**10**		
Character Length (including spaces)	**< 70**	79	Cust. Specific
Check Digit Routine	**Modulus 10**	2,1 weight sequence	
Check digits on Account# and Scan line total?	**Yes**		

* Perforation should be very fine to prevent torn edges, **top edge perforation is preferred**, with scan line located near bottom of doc. Also, any print area used for customer signature or other writing, should be located well out of the scan band width to avoid pen / pencil marks within scan band, causing OCR misread.

** **MICR** (magnetic ink) should not be used on documents. Some MICR can be tolerated, if either the length of the doc or its magnetic profile do not match those of a valid check. If either is the case, the envelope will most likely outsort and require manual opening. Note also, not to use drop-out, fluorescent or phosphorescent ink within any area of the scan band, including the scan line characters.

*** Print type that can be read is OCRA (alphanumeric, special),

**** Document material should be uncoated stock, preferably no recycled paper. Laser printed documents should be discharged after printing to avoid static buildup within envelope. Static buildup can cause insertions to "stick" to each other and/or the envelope.

***** Scan line should include at minimum a customer or invoice number, to post payment on customer's AR system, and dollar amount to balance to check amount. Spacing between the fields @ 10 cpi is required.

Additional Document Specifications

A. All notification boxes should be printed in drop-out ink and located on the front of the document. Recommend a clear band of 1/2 inch around box.

B. The Account# printed on the customer portion of the document should be identical to the account# represented on the scan line (including any check digit).

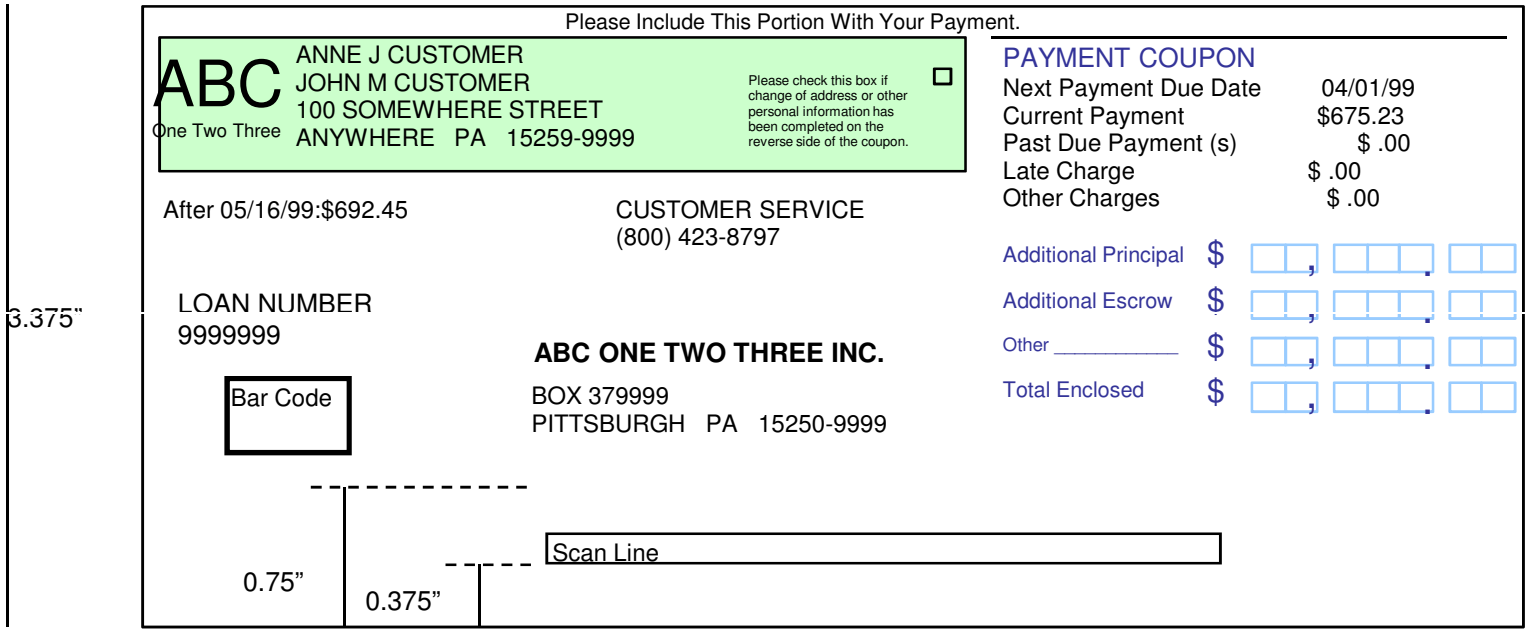
C. Preprinted dollar amount with an "Amount Enclosed" box should be included on the front of the document, well away from the scan line, to indicate customer's enclosed payment

D. Guidelines for character/courtesy boxes:
- Drop out ink should be used for character/courtesy boxes
- Need to have space between boxes
- Box labels should not be in drop out ink

E. Multiple documents - If more than one document is used, it is vital that the documents be consistent in presenting the following information:
- scanline location
- check boxes
- all notification fields

F. Mark Sense - Up to five areas can be identified for mark sense, e.g., change of address, authorization signatures, check boxes.

DOCUMENT


Please Include This Portion With Your Payment.
ABC
One Two Three
ANNE J CUSTOMER
JOHN M CUSTOMER
100 SOMEWHERE STREET
ANYWHERE PA 15259-9999
Please check this box if change of address or other personal information has been completed on the reverse side of the coupon.
After 05/16/99:$692.45
CUSTOMER SERVICE
(800) 423-8797
LOAN NUMBER
9999999
Bar Code
ABC ONE TWO THREE INC.
BOX 379999
PITTSBURGH PA 15250-9999
PAYMENT COUPON
Next Payment Due Date 04/01/99
Current Payment $675.23
Past Due Payment (s) $ .00
Late Charge $ .00
Other Charges $ .00
Additional Principal $
Additional Escrow $
Other _____ $
Total Enclosed $
Scan Line
0.75”
0.375”
3.375”
6.875”

Lockbox Data Transmission

Interface Control Document

Acceptance Log

Name	No Exceptions?	Signature	Date
Linda Sexton	Yes / No		
Michelle Mutch	Yes / No		
David Hertwig	Yes / No		

Prepared for:

Texas Department of Transportation
Texas Turnpike Authority Division

Version 1.0
March 31, 2009

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Appendix

Document Revision History

Table 1 Document Revision History

Version	Date	Summary of Revisions
0.1	07/31/08	Initial submittal by T2P
0.2	02/19/09	Added specifications for lockbox e-returns and reporting data files
0.3	02/20/09	General revisions, added specifications for manifest file
0.4	02/26/09	Revisions to data file specifications and file acknowledgement process
0.5	03/11/09	Updated Document Type (doc_type) variable for E-Returns Video Trip Lockbox and E-Returns Tag Holder Lockbox data files as required field
0.6	03/13/09	Removed Exception Fee (excpt_fee) variable for Reporting Video Trip Lockbox and Reporting Video Trip Lockbox data files as required field following revised Lockbox Reporting Requirements
0.7	03/26/09	General revisions and validation of data fields against Lockbox System Requirements
1.0	03/31/09	Final iteration of ICD requirements document

1. Document Acronyms and Definitions

Table 2 Document Acronyms and Definitions

Acronym	Acronym definition
ACK	Acknowledgement
CRC 32	Cyclic Redundancy Check (32-bit)
CSC	Customer Service Center
CSR	Customer Service Representative
CT	Central Time
ETLF	E-Returns Tag Holder Lockbox File
EVLF	E-Returns Video Trip Lockbox File
FTP	File Transfer Protocol
GMT	Greenwich Mean Time – Universal Time Zone
ICD	Interface Control Document
NACK	Not Acknowledged
TLF	Tag Holder Lockbox File
RTLF	Reporting Tag Holder Lockbox File
RVLF	Reporting Video Trip Lockbox File
TTA	Texas Turnpike Authority - A division of the Texas Department of Transportation
TxDOT	Texas Department of Transportation
VLF	Video Trip Lockbox File
VPN	Virtual Private Network
XML	Extensible Markup Language

2. Introduction – Subsystem Interface Controls

This document is the Interface Control Document (ICD) that defines the interface between the third-party lockbox services provider, contracted by the Texas Department of Transportation (TxDOT), and TxDOT's Customer Service Center (CSC) customer management software.

2.1 Purpose

The purpose of this document is to define the system interface that will allow the lockbox services provider to send the CSC, via Extensible Markup Language (XML) files, data regarding payments received and processed through the contracted lockbox. The CSC will accept and process the data files received from the lockbox provider to apply payments down to the appropriate accounts and transactions via the customer management software.

Note: Although this system interface will begin with Invoices and Violation Notices, this interface may be expanded to include other CSC customer communications letters in the future. When those projects are initiated, this document will be updated to capture the interface requirements for those documents.

2.2 Referenced Documents

The following documents form a part of these design criteria to the extent stated by reference within this document.

- TxDOT Lockbox Project Requirements Document
- TxDOT Lockbox Project Reporting Requirements Document

2.2.1 Vendor Documents

The following documents were provided by the lockbox service provider as part of their contractual deliverables to TxDOT in the design of this interface.

- Bank of New York Mellon Lockbox Set-Up Documents
- Master Lockbox and Custodial Account Agreement, dated November 9, 2007, between TxDOT and The Bank of New York Trust Company
- TxDOT and Cintra Zachary Facility Agreement for SH 130 Segments Five and Six

3. Lockbox Services Provider – to – CSC Interface

The lockbox services provider – to – the Texas Department of Transportation (TxDOT) CSC Interface consists of the following file transfers:

Note: All files sent to the CSC from the lockbox services provider will be accomplished using File Transfer Protocol (FTP). The FTP server will be housed by TxDOT and must be password protected. Usernames and passwords will be shared at a mutually agreed time between the lockbox service provider and TxDOT.

- Video Trip Lockbox File: (Pushed from lockbox services provider to the FTP server for use by the CSC)
- Tag Holder Lockbox File: (Pushed from lockbox services provider to the FTP server for use by the CSC)
- E-Returns Video Trip Lockbox File: (Pushed from lockbox services provider to the FTP server for use by the CSC)
- E-Returns Tag Holder Lockbox File: (Pushed from lockbox services provider to the FTP server for use by the CSC)
- Reporting Video Trip Lockbox File: (Pushed from lockbox services provider to the FTP server for use by the CSC)
- Reporting Tag Holder Lockbox File: (Pushed from lockbox services provider to the FTP server for use by the CSC)
- Acknowledgement Files: (Send by the CSC to the lockbox services provider)

Figure 1 Lockbox Overview

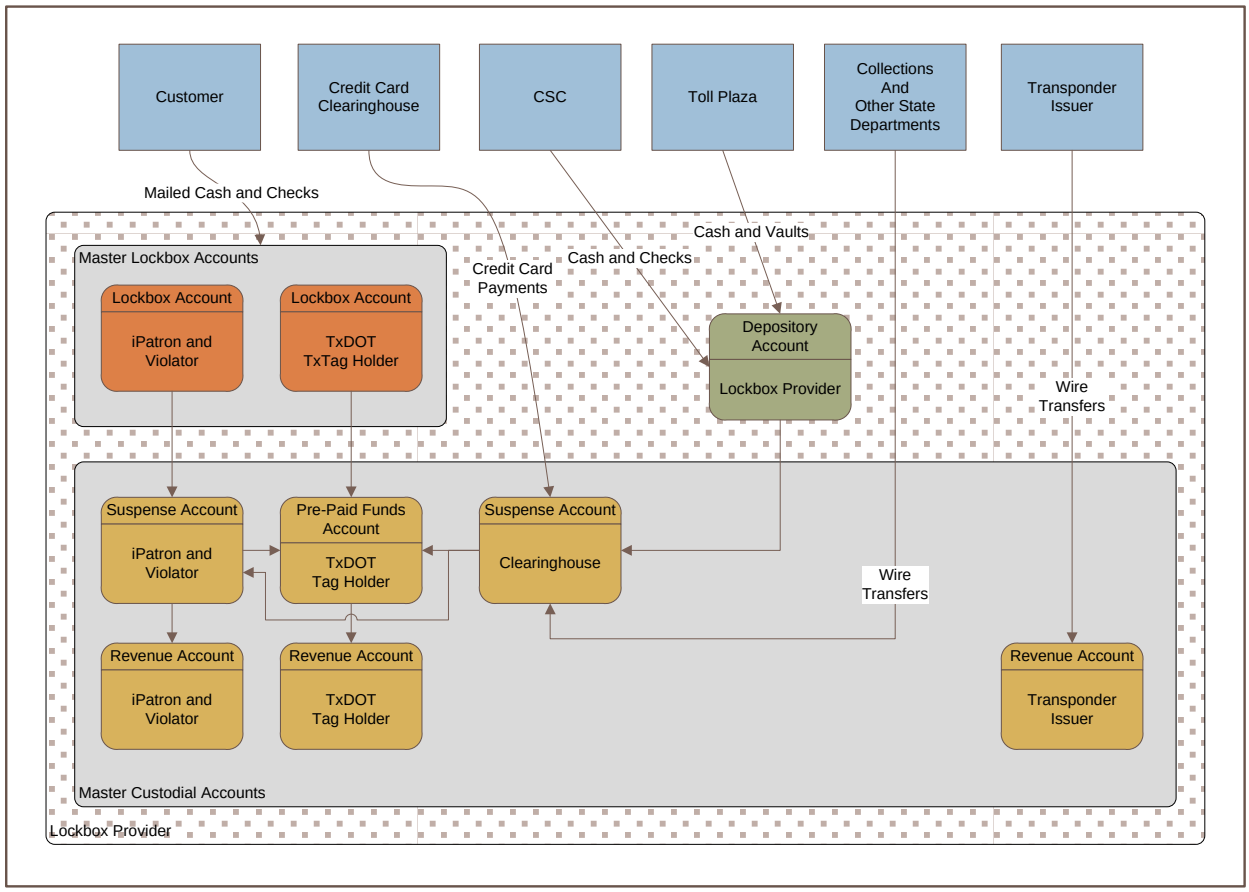
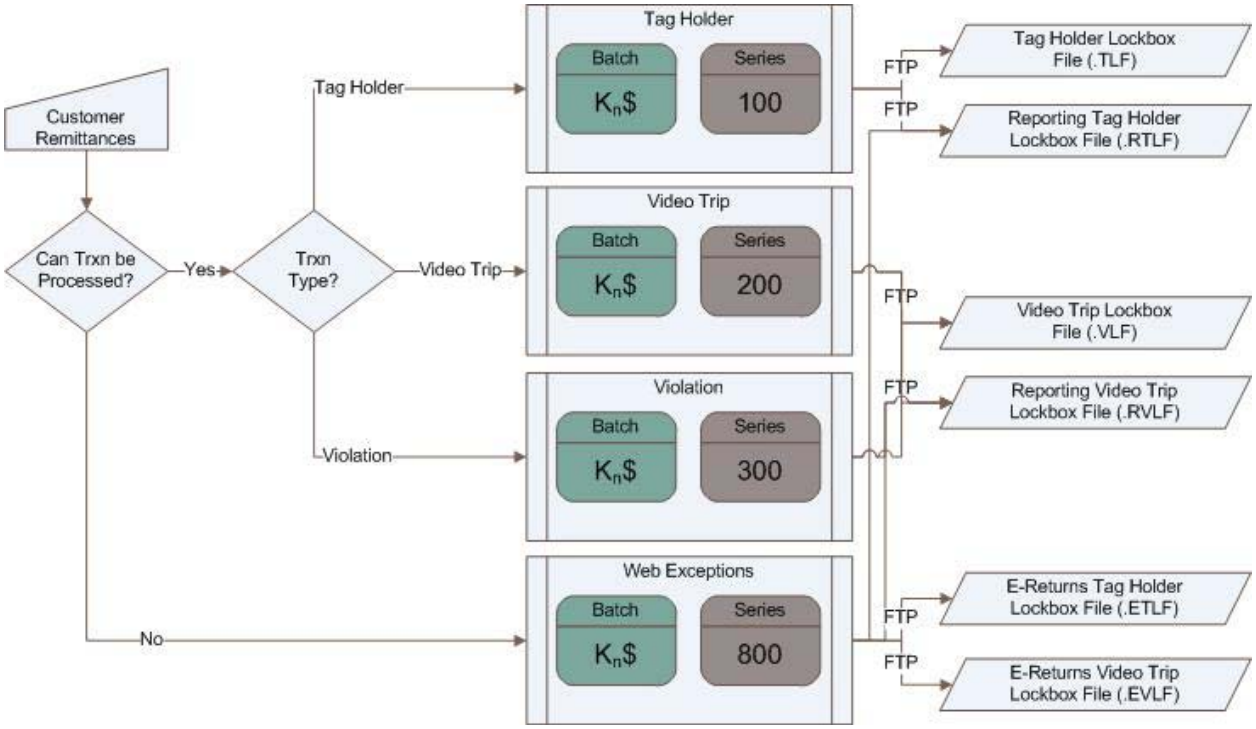


Figure 2 Lockbox Data Files Overview



3.1.1 Lockbox Services Provider File Transfer Locations

The lockbox services provider will use the following locations on the TxDOT FTP Server to push files required by the CSC / lockbox services provider interface. In addition, all archive folders will only be purged upon TxDOT approval.

Note: TxDOT will constantly monitor the FTP site for file transfers.

3.1.1.1 Video Trip Lockbox File – FTP Server File Location

After the lockbox services provider has created the Violation Lockbox XML data file, the lockbox service provider will zip the data file into one file and push the file to the CSC for processing.

The structure of the file system on the FTP Server for delivery of Video Trip Lockbox File will be as follows:

```
ftp://(FTP Server)/Lockbox/VLF/input
ftp://(FTP Server)/Lockbox/VLF/input/sending
ftp://(FTP Server)/Lockbox/VLF/input/arch
```

The lockbox service provider will push the Violation Lockbox ZIP file (via FTP) into the CSC's /input/sending directory on the FTP Server. The lockbox service provider will then move the file from the /input/sending subdirectory to the main /input directory for pickup. This is done to prevent the CSC from picking up a file that has not completed transmission. The CSC will pick up the Violation Lockbox ZIP file from the /input directory and then move the file to the /input/arch directory for archive purposes.

3.1.1.2 Tag Holder Lockbox File – FTP Server File Location

After the lockbox services provider has created the Tag Holder Account Lockbox XML data file, the lockbox service provider will zip the data file into one file and push the file to the CSC for processing.

The structure of the file system on the FTP Server for delivery of Tag Holder Lockbox File will be as follows:

```
ftp://(FTP Server)/Lockbox/TLF/input
ftp://(FTP Server)/Lockbox/TLF/input/sending
ftp://(FTP Server)/Lockbox/TLF/input/arch
```

The lockbox service provider will push the Tag Holder Account Lockbox ZIP file (via FTP) into the CSC's /input/sending directory on the FTP Server. The lockbox service provider will then move the file from the /input/sending subdirectory to the main /input directory for pickup. This is done to prevent the CSC from picking up a file that has not completed transmission. The CSC will pick up the Tag Holder Account Lockbox ZIP file from the /input directory and then move the file to the /input/arch directory for archive purposes.

3.1.1.3 E-Returns Video Trip Lockbox File – FTP Server File Location

After the lockbox services provider has created the E-Returns Violation Lockbox XML data file, the lockbox service provider will zip the data file into one file and push the file to the CSC for processing.

The structure of the file system on the FTP Server for delivery of E-Returns Video Trip Lockbox File will be as follows:

```
ftp://(FTP Server)/Lockbox/EVLF/input
ftp://(FTP Server)/Lockbox/EVLF/input/sending
ftp://(FTP Server)/Lockbox/EVLF/input/arch
```

The lockbox service provider will push the E-Returns Violation Lockbox ZIP file (via FTP) into the CSC's /input/sending directory on the FTP Server. The lockbox service provider will then move the file from the /input/sending subdirectory to the main /input directory for pickup. This is done to prevent the CSC from picking up a file that has not completed transmission. The CSC will pick up the E-Returns Violation Lockbox ZIP file from the /input directory and then move the file to the /input/arch directory for archive purposes.

3.1.1.4 E-Returns Tag Holder Lockbox File – FTP Server File Location

After the lockbox services provider has created the E-Returns Tag Holder Account Lockbox XML data file, the lockbox service provider will zip the data file into one file and push the file to the CSC for processing.

The structure of the file system on the FTP Server for delivery of E-Returns Tag Holder Lockbox File will be as follows:

```
ftp://(FTP Server)/Lockbox/ETLF/input
ftp://(FTP Server)/Lockbox/ETLF/input/sending
ftp://(FTP Server)/Lockbox/ETLF/input/arch
```

The lockbox service provider will push the E-Returns Tag Holder Account Lockbox ZIP file (via FTP) into the CSC's /input/sending directory on the FTP Server. The lockbox service provider will then move the file from the /input/sending subdirectory to the main /input directory for pickup. This is done to prevent the CSC from picking up a file that has not completed transmission. The CSC will pick up the E-Returns Tag Holder Account Lockbox ZIP file from the /input directory and then move the file to the /input/arch directory for archive purposes.

3.1.1.5 Reporting Video Trip Lockbox File – FTP Server File Location

After the lockbox services provider has created the Reporting Violation Lockbox XML data file, the lockbox service provider will zip the data file into one file and push the file to the CSC for processing.

The structure of the file system on the FTP Server for delivery of Reporting Video Trip Lockbox File will be as follows:

```
ftp://(FTP Server)/Lockbox/RVLF/input
ftp://(FTP Server)/Lockbox/RVLF/input/sending
ftp://(FTP Server)/Lockbox/RVLF/input/arch
```

The lockbox service provider will push the Reporting Violation Lockbox ZIP file (via FTP) into the CSC's /input/sending directory on the FTP Server. The lockbox service provider will then move the file from the

/input/sending subdirectory to the main /input directory for pickup. This is done to prevent the CSC from picking up a file that has not completed transmission. The CSC will pick up the Reporting Violation Lockbox ZIP file from the /input directory and then move the file to the /input/arch directory for archive purposes.

3.1.1.6 Reporting Tag Holder Lockbox File – FTP Server File Location

After the lockbox services provider has created the Reporting Tag Holder Account Lockbox XML data file, the lockbox service provider will zip the data file into one file and push the file to the CSC for processing.

The structure of the file system on the FTP Server for delivery of Reporting Tag Holder Lockbox File will be as follows:

```
ftp://(FTP Server)/Lockbox/RTLF/input
ftp://(FTP Server)/Lockbox/RTLF/input/sending
ftp://(FTP Server)/Lockbox/RTLF/input/arch
```

The lockbox service provider will push the Reporting Tag Holder Account Lockbox ZIP file (via FTP) into the CSC's /input/sending directory on the FTP Server. The lockbox service provider will then move the file from the /input/sending subdirectory to the main /input directory for pickup. This is done to prevent the CSC from picking up a file that has not completed transmission. The CSC will pick up the Reporting Tag Holder Account Lockbox ZIP file from the /input directory and then move the file to the /input/arch directory for archive purposes.

3.1.1.7 Acknowledgement File Transfers – FTP Server File Location

The structure of the file system on the FTP Server for pickup of Acknowledgement Files will be as follows:

```
ftp://(FTP Server)/Lockbox/ACK/input
ftp://(FTP Server)/Lockbox/ACK/input/sending
ftp://(FTP Server)/Lockbox/ACK/input/arch
```

The receiving entity will transfer Acknowledgment Files (via FTP) into the /input/sending directory and move the file to the /input/arch directory for archive purposes after a file has been received.

4. CSC / Lockbox service provider Interface File Types

This section of the ICD defines the requirements for each file type required from the lockbox service provider. In this section, you will find information about the following file types:

- Video Trip Lockbox File
- Tag Holder Lockbox File
- E-Returns Video Trip Lockbox File
- E-Returns Tag Holder Lockbox File
- Reporting Video Trip Lockbox File
- Reporting Tag Holder Lockbox File
- Acknowledgement File

Common Characteristics of All Files:

All files the lockbox service provider transmits to the CSC will be generated in XML format and zipped in a ZIP file before the transmission.

All ZIP files will include a manifest (txt file) defining the number of files included in the ZIP file. The count will consist of each XML file in the ZIP file, excluding the manifest file itself.

Upon receipt of the ZIP file, the recipient will be required to perform validation against the file according to the rules set in place by Section *4.7 Acknowledgement File*.

All times used in the file name format for XML and ZIP files are designated in GMT (Universal Time Zone – Greenwich Mean Time).

4.1 Video Trip Lockbox File

Video Trip Lockbox Files are generated and packaged by the lockbox service provider. The Video Trip Lockbox File includes a list with payment information related to video trip-related accounts for payments received and processed by the lockbox service provider.

Video Trip Lockbox Files are transferred daily, usually overnight, to the CSC to process and apply payments to video trip accounts.

4.1.1 File Transfer Timetable

Video Trip Lockbox Files will be available on the TxDOT FTP Server once a day by 20:30 Central Time (CT).

4.1.2 File Name Format

Video Trip Lockbox Files will have the date and creation timestamp as part of the filename and a ".vlf" suffix file extension. File creation time will be in 24 hour format.

"yyyymmddhhmnss.vlf"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045.vlf`

All Video Trip Lockbox Files will be zipped. The ZIP file will be defined using the following format:

"yyyymmddhhmnss_vlf.zip"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045_vlf.zip`

Note: The file timestamp in this zip file should be the same as the timestamp in the Video Trip Lockbox File name as documented above.

4.1.3 File Format

The files involved in the file transfer that are described in this section are XML Version 1.0 files. Every field making up each file type will have a defined XML tag that will be used to define the field and structure the XML document / file.

4.1.3.1 Data Record Format – Video Trip Lockbox File

When a Video Trip Lockbox File is packaged for transmission, the lockbox service provider must construct the file so that it contains all of the required fields listed below. The file is transmitted to the appropriate directory location on the TxDOT FTP Server for processing.

Table 3 Data Record Format – Video Trip Lockbox File

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.0	**<documents>**					
1.1	Batch Number	batch_no	N/A	Y	Integer	Batch number for data file
1.1	Batch Count	batch_count	N/A	Y	Integer	Number of payments in data file
1.1	**<document>**					
1.1.1	Document Type	doc_type	3	N	Integer	Identifier for document type
1.1.1	Document Number	doc_no	12	N	Integer	Document number from scan line on customer remittance coupon
1.1.1	Document Generation Date	gen_date	10	N	yyyy/mm/dd	Generation date for document from scan line on customer remittance coupon
1.1.1	Customer Account Number	acct_no	1-10	Y	Integer	iPatron or Violation customer account number
1.1.1	Total Amount Due	amt_due	4-12	N	No $ sign, no commas, with two decimal places, always positive	Total amount due from scan line on customer remittance coupon
1.1.1	Payment Amount	pmt_amt	4-12	Y	No $ sign, no commas, with two decimal places, always positive	Payment amount processed for remittance

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.1.1	Payment Type	pmt_type	1	Y	K = Check C = Cash	Payment type processed
1.1.1	Customer Check Number	check_no	4-5	N	Integer	Customer check number

4.2 Tag Holder Lockbox File

Tag Holder Lockbox Files are generated and packaged by the lockbox service provider. The Tag Holder Lockbox File includes a list with payment information related to tag holder accounts for payments received and processed by the lockbox service provider.

Tag Holder Lockbox Files are transferred daily, usually overnight, to the CSC to process and apply payments to tag holder accounts.

4.2.1 File Transfer Timetable

Tag Holder Lockbox Files will be available on the TxDOT FTP Server once a day by 20:30 CT.

4.2.2 File Name Format

Tag Holder Lockbox Files will have the date and creation timestamp as part of the filename and a ".tlf" suffix file extension. File creation time will be in 24 hour format.

"yyyymmddhhmnss.tlf"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045.tlf`

All Tag Holder Lockbox Files will be zipped. The ZIP file will be defined using the following format:

"yyyymmddhhmnss_ tlf.zip"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045_tlf.zip`

Note: The file timestamp in this zip file should be the same as the timestamp in the Tag Holder Lockbox File name as documented above.

4.2.3 File Format

The files involved in the file transfer that are described in this section are XML Version 1.0 files. Every field making up each file type will have a defined XML tag that will be used to define the field and structure the XML document / file.

4.2.3.1 Data Record Format – Tag Holder Lockbox Files

When a Tag Holder Lockbox File is packaged for transmission, the lockbox service provider must construct the file so that it contains all of the required fields listed below. The file is transmitted to the appropriate directory location on the TxDOT FTP Server for processing.

Table 4 Data Record Format – Tag Holder Lockbox File

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.0	**<documents>**					
1.1	Batch Number	batch_no	N/A	Y	Integer	Batch number for data file
1.1	Batch Count	batch_count	N/A	Y	Integer	Number of payments in data file
1.1	**<document>**					
1.1.1	Document Type	doc_type	3	N	Integer	Identifier for document type
1.1.1	Document Number	doc_no	12	N	Integer	Document number from scan line on customer remittance coupon
1.1.1	Document Generation Date	gen_date	10	N	yyyy/mm/dd	Generation date for document from scan line on customer remittance coupon
1.1.1	Customer Account Number	acct_no	1-10	Y	Integer	Tag holder customer account number
1.1.1	Total Amount Due	amt_due	4-12	N	No $ sign, no commas, with two decimal places, always positive	Total amount due from scan line on customer remittance coupon
1.1.1	Payment Amount	pmt_amt	4-12	Y	No $ sign, no commas, with two decimal places, always positive	Payment amount processed for remittance
1.1.1	Payment Type	pmt_type	1	Y	K = Check C = Cash	Payment type processed

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.1.1	Customer Check Number	check_no	4-5	N	Integer	Customer check number

4.3 E-Returns Video Trip Lockbox File

E-Returns Video Trip Lockbox Files are generated and packaged by the lockbox service provider. The E-Returns Video Trip Lockbox File includes a list with payment information related to video trip-related accounts for returned checks that will be manually processed by the CSC.

E-Returns Video Trip Lockbox Files are transferred daily, usually overnight, to the CSC for manual processing.

4.3.1 File Transfer Timetable

E-Returns Video Trip Lockbox Files will be available on the TxDOT FTP Server once a day by 20:30 CT.

4.3.2 File Name Format

E-Returns Video Trip Lockbox Files will have the date and creation timestamp as part of the filename and an ".evlf" suffix file extension. File creation time will be in 24 hour format.

"yyyymmddhhmnss.evlf"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045.evlf`

All E-Returns Video Trip Lockbox Files will be zipped. The ZIP file will be defined using the following format:

"yyyymmddhhmnss_evlf.zip"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045_evlf.zip`

Note: The file timestamp in this zip file should be the same as the timestamp in the E-Returns Video Trip Lockbox File name as documented above.

4.3.3 File Format

The files involved in the file transfer that are described in this section are XML Version 1.0 files. Every field making up each file type will have a defined XML tag that will be used to define the field and structure the XML document / file.

4.3.3.1 Data Record Format – E-Returns Video Trip Lockbox File

When an E-Returns Video Trip Lockbox File is packaged for transmission, the lockbox service provider must construct the file so that it contains all of the required fields listed below. The file is transmitted to the appropriate directory location on the TxDOT FTP Server for processing.

Table 5 Data Record Format – E-Returns Video Trip Lockbox File

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.0	**<documents>**					
1.1	Batch Number	batch_no	N/A	Y	Integer	Batch number for data file
1.1	Batch Count	batch_count	N/A	Y	Integer	Number of processed returned checks in data file
1.1	**<document>**					
1.1.1	Document Type	doc_type	3	Y	Integer	Identifier for document type
1.1.1	Document Number	doc_no	12	N	Integer	Document number from scan line on customer remittance coupon
1.1.1	Document Generation Date	gen_date	10	N	yyyy/mm/dd	Generation date for document from scan line on customer remittance coupon
1.1.1	Original Deposit Date	orig_dep_date	10	Y	yyyy/mm/dd	Original deposit date for funds
1.1.1	Original Batch Number	orig_batch_no	N/A	Y	Integer	Original batch number when remittance was processed
1.1.1	Original Sequence Number	orig_seq_no	N/A	Y	Integer	Sequence number of remittance when original batch was processed

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.1.1	Logical Sequence Number	logic_seq_no	N/A	Y	Integer	Sequence number of remittance when logical batch was processed for e-returns
1.1.1	Return Reason Code	rtn_reason_code	2	Y	Reason codes 01 through 24	Standard return reason code for e-returns (see Appendix 1)
1.1.1	Customer Account Number	acct_no	1-10	Y	Integer	iPatron or Violation customer account number
1.1.1	Total Amount Due	amt_due	4-12	N	No $ sign, no commas, with two decimal places, always positive	Total Amount Due from scan line on customer remittance coupon
1.1.1	Payment Amount	pmt_amt	4-12	Y	No $ sign, no commas, with two decimal places, always positive	Payment Amount processed
1.1.1	Customer Check Number	check_no	4-5	Y	Integer	Customer check number

4.4 E-Returns Tag Holder Lockbox File

E-Returns Tag Holder Lockbox Files are generated and packaged by the lockbox service provider. The E-Returns Tag Holder Lockbox File includes a list with payment information related to tag holder accounts for returned checks that will be manually processed by the CSC.

E-Returns Tag Holder Lockbox Files are transferred daily, usually overnight, to the CSC for manual processing.

4.4.1 File Transfer Timetable

E-Returns Tag Holder Lockbox Files will be available on the TxDOT FTP Server once a day by 20:30 CT.

4.4.2 File Name Format

E-Returns Tag Holder Lockbox Files will have the date and creation timestamp as part of the filename and an ".etlf" suffix file extension. File creation time will be in 24 hour format.

"yyyymmddhhmnss.etlf"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045.etlf`

All E-Returns Tag Holder Lockbox Files will be zipped. The ZIP file will be defined using the following format:

"yyyymmddhhmnss_etlf.zip"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045_etlf.zip`

Note: The file timestamp in this zip file should be the same as the timestamp in the E-Returns Tag Holder Lockbox File name as documented above.

4.4.3 File Format

The files involved in the file transfer that are described in this section are XML Version 1.0 files. Every field making up each file type will have a defined XML tag that will be used to define the field and structure the XML document / file.

4.4.3.1 Data Record Format – E-Returns Tag Holder Lockbox File

When an E-Returns Tag Holder Lockbox File is packaged for transmission, the lockbox service provider must construct the file so that it contains all of the required fields listed below. The file is transmitted to the appropriate directory location on the TxDOT FTP Server for processing.

Table 6 Data Record Format – E-Returns Tag Holder Lockbox File

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.0	**<documents>**					
1.1	Batch Number	batch_no	N/A	Y	Integer	Batch number for data file
1.1	Batch Count	batch_count	N/A	Y	Integer	Number of processed returned checks in data file
1.1	**<document>**					
1.1.1	Document Type	doc_type	3	Y	Integer	Identifier for document type
1.1.1	Document Number	doc_no	12	N	Integer	Document number from scan line on customer remittance coupon
1.1.1	Document Generation Date	gen_date	10	N	yyyy/mm/dd	Generation date for document from scan line on customer remittance coupon
1.1.1	Original Deposit Date	orig_dep_date	10	Y	yyyy/mm/dd	Original deposit date for funds
1.1.1	Original Batch Number	orig_batch_no	N/A	Y	Integer	Original batch number when remittance was processed
1.1.1	Original Sequence Number	orig_seq_no	N/A	Y	Integer	Sequence number of remittance when original batch was processed

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.1.1	Logical Sequence Number	logic_seq_no	N/A	Y	Integer	Sequence number of remittance when logical batch was processed for e-returns
1.1.1	Return Reason Code	rtn_reason_code	2	Y	Reason codes 01 through 24	Standard return reason code for e-returns (see Appendix 1)
1.1.1	Customer Account Number	acct_no	1-10	Y	Integer	Tag holder customer account number
1.1.1	Total Amount Due	amt_due	4-12	N	No $ sign, no commas, with two decimal places, always positive	Total Amount Due from scan line on customer remittance coupon
1.1.1	Payment Amount	pmt_amt	4-12	Y	No $ sign, no commas, with two decimal places, always positive	Payment Amount processed
1.1.1	Customer Check Number	check_no	4-5	Y	Integer	Customer check number

4.5 Reporting Video Trip Lockbox File

Reporting Video Trip Lockbox Files are generated and packaged by the lockbox service provider. The Reporting Lockbox File includes a list with payments and payment processing information related to video trip-related accounts for payments received and processed by the lockbox service provider.

Reporting Video Trip Lockbox Files are transferred daily, usually overnight, to the CSC for processing and report generation.

4.5.1 File Transfer Timetable

Reporting Video Trip Lockbox Files will be available on the TxDOT FTP Server once a day by 20:30 CT.

4.5.2 File Name Format

Reporting Video Trip Lockbox Files will have the date and creation timestamp as part of the filename and an ".rvlf" suffix file extension. File creation time will be in 24 hour format.

"yyyymmddhhmnss.rvlf"

where:
yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045.rvlf`

All Reporting Video Trip Lockbox Files will be zipped. The ZIP file will be defined using the following format:

"yyyymmddhhmnss_rvlf.zip"

where:
yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045_rvlf.zip`

Note: The file timestamp in this zip file should be the same as the timestamp in the Reporting Video Trip Lockbox File name as documented above.

4.5.3 File Format

The files involved in the file transfer that are described in this section are XML Version 1.0 files. Every field making up each file type will have a defined XML tag that will be used to define the field and structure the XML document / file.

4.5.3.1 Data Record Format – Reporting Video Trip Lockbox File

When a Reporting Video Trip Lockbox File is packaged for transmission, the lockbox service provider must construct the file so that it contains all of the required fields listed below. The file is transmitted to the appropriate directory location on the TxDOT FTP Server for processing.

Table 7 Data Record Format – Reporting Video Trip Lockbox File

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.0	**<documents>**					
1.1	Batch Number	batch_no	N/A	Y	Integer	Batch number for data file
1.1	Batch Series	batch_series	N/A	Y	Integer	Batch series for data file
1.1	Batch Count	batch_count	N/A	Y	Integer	Number of processed returned checks in data file
1.1	**<document>**					
1.1.1	Document Type	doc_type	3	N	Integer	Identifier for document type
1.1.1	Document Number	doc_no	12	N	Integer	Document number from scan line on customer remittance coupon
1.1.1	Document Generation Date	gen_date	10	N	yyyy/mm/dd	Generation date for document from scan line on customer remittance coupon
1.1.1	Original Deposit Date	orig_dep_date	10	N	yyyy/mm/dd	Original deposit date for funds – only applicable for e-returns

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.1.1	Original Batch Number	orig_batch_no	N/A	N	Integer	Original batch number when remittance was processed – only applicable for e-returns
1.1.1	Original Sequence Number	orig_seq_no	N/A	N	Integer	Sequence number of remittance when original batch was processed – only applicable for e-returns
1.1.1	Logical Batch Number	logic_batch_no	N/A	N	Integer	Batch number when remittance was processed – only applicable for e-returns
1.1.1	Logical Sequence Number	logic_seq_no	N/A	N	Integer	Sequence number of remittance when logical batch was processed for e-returns – only applicable for e-returns
1.1.1	Return Reason Code	rtn_reason_code	2	N	Reason codes 01 through 24	Standard return reason code for e-returns (see Appendix 1) – only applicable for e-returns
1.1.1	Holdover Days	hldover_days	N/A	N	Integer	Number of days remittance was held before being processed – only applicable for e-returns

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.1.1	Customer Account Number	acct_no	1-10	Y	Integer	iPatron or Violation customer account number
1.1.1	Total Amount Due	amt_due	4-12	N	No $ sign, no commas, with two decimal places, always positive	Total Amount Due from scan line on customer remittance coupon
1.1.1	Payment Amount	pmt_amt	4-12	Y	No $ sign, no commas, with two decimal places, always positive	Payment Amount processed
1.1.1	Payment Type	pmt_type	1	Y	K = Check C = Cash	Payment Type processed
1.1.1	Customer Check Number	check_no	4-5	N	Integer	Customer check number

4.6 Reporting Tag Holder Lockbox File

Reporting Tag Holder Lockbox Files are generated and packaged by the lockbox service provider. The Reporting Lockbox File includes a list with payments and payment processing information related to tag holder accounts for payments received and processed by the lockbox service provider.

Reporting Tag Holder Lockbox Files are transferred daily, usually overnight, to the CSC for processing and report generation.

4.6.1 File Transfer Timetable

Reporting Tag Holder Lockbox Files will be available on the TxDOT FTP Server once a day by 20:30 CT.

4.6.2 File Name Format

Reporting Tag Holder Lockbox Files will have the date and creation timestamp as part of the filename and an ".rtlf" suffix file extension. File creation time will be in 24 hour format.

"yyyymmddhhmnss.rtlf"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045.rtlf`

All Reporting Tag Holder Lockbox Files will be zipped. The ZIP file will be defined using the following format:

"yyyymmddhhmnss_rtlf.zip"

where: yyyy = year
mm = month
dd = day
hh = hour
mn = minute
ss = second

Example: `20090220143045_rtlf.zip`

Note: The file timestamp in this zip file should be the same as the timestamp in the Reporting Tag Holder Lockbox File name as documented above.

4.6.3 File Format

The files involved in the file transfer that are described in this section are XML Version 1.0 files. Every field making up each file type will have a defined XML tag that will be used to define the field and structure the XML document / file.

4.6.3.1 Data Record Format – Reporting Tag Holder Lockbox File

When a Reporting Tag Holder Lockbox File is packaged for transmission, the lockbox service provider must construct the file so that it contains all of the required fields listed below. The file is transmitted to the appropriate directory location on the TxDOT FTP Server for processing.

Table 8 Data Record Format – Reporting Tag Holder Lockbox File

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.0	**<documents>**					
1.1	Batch Number	batch_no	N/A	Y	Integer	Batch number for data file
1.1	Batch Series	batch_series	N/A	Y	Integer	Batch series for data file
1.1	Batch Count	batch_count	N/A	Y	Integer	Number of processed returned checks in data file
1.1	**<document>**					
1.1.1	Document Type	doc_type	3	N	Integer	Identifier for document type
1.1.1	Document Number	doc_no	12	N	Integer	Document number from scan line on customer remittance coupon
1.1.1	Document Generation Date	gen_date	10	N	yyyy/mm/dd	Generation date for document from scan line on customer remittance coupon
1.1.1	Original Deposit Date	orig_dep_date	10	N	yyyy/mm/dd	Original deposit date for funds – only applicable for e-returns

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.1.1	Original Batch Number	orig_batch_no	N/A	N	Integer	Original batch number when remittance was processed – only applicable for e-returns
1.1.1	Original Sequence Number	orig_seq_no	N/A	N	Integer	Sequence number of remittance when original batch was processed – only applicable for e-returns
1.1.1	Logical Batch Number	logic_batch_no	N/A	N	Integer	Batch number when remittance was processed – only applicable for e-returns
1.1.1	Logical Sequence Number	logic_seq_no	N/A	N	Integer	Sequence number of remittance when logical batch was processed for e-returns – only applicable for e-returns
1.1.1	Return Reason Code	rtn_reason_code	2	N	Reason codes 01 through 24	Standard return reason code for e-returns (see Appendix 1) – only applicable for e-returns
1.1.1	Holdover Days	hldover_days	N/A	N	Integer	Number of days remittance was held before being processed – only applicable for e-returns

Type	Field Name	XML Tag Name	Length	Required Field	Format/Range	Description
1.1.1	Customer Account Number	acct_no	1-10	Y	Integer	Tag holder customer account number
1.1.1	Total Amount Due	amt_due	4-12	N	No $ sign, no commas, with two decimal places, always positive	Total Amount Due from scan line on customer remittance coupon
1.1.1	Payment Amount	pmt_amt	4-12	Y	No $ sign, no commas, with two decimal places, always positive	Payment Amount processed
1.1.1	Payment Type	pmt_type	1	Y	K = Check C = Cash	Payment Type processed
1.1.1	Customer Check Number	check_no	4-5	N	Integer	Customer check number

4.7 Acknowledgement File

Acknowledgement Files will be sent from the receiving entity (CSC) after every file transfer. Acknowledgement Files will indicate a successful or unsuccessful file transfer based on verification of the transferred file's checksum and for select file types, record count.

File Transfers:

The acknowledgement process is broken down into 2 sections – CheckSum Validation and Record Count Validation. If all applicable checks pass, an **_ack** is communicated to the sending entity. If one fails, a **_nack** is communicated to the sending entity.

Checksum Validation:

After a ZIP file is transferred (via FTP) from the /input/sending subdirectory into the main /input directory, the receiving entity (CSC) will perform a checksum validation against the ZIP file. If the ZIP file test passed, the checksum validation was successful. If the ZIP file test failed, the checksum validation was unsuccessful. The CRC 32 standard algorithm is used to compute the checksum value.

Record Count Validation:

ZIP files containing an XML file require record count validation within the XML file. The recipient shall validate the number of documents included in the XML file against the number of documents the sending entity defined at the beginning of the XML file. If the two values match, this portion of the validation passes. If the two values do not match, this portion of the validation fails.

Acknowledging the file is done before archiving the file to prevent the receiving entity from archiving a bad file. Should a file prove to be invalid, the receiving entity will delete the invalid file and the sending entity will be notified by the **_nack** file. Once the entity that sent the original file receives the **_nack** file, they will rezip the file and send it again. Should the second attempt also result in the generation of a **_nack** file, the sending entity will contact the target entity to notify them of the problem, investigate the problem and transfer the file manually to the target entity once the problem has been resolved.

Note: All Acknowledgement Files will be sent within five (5) minutes of the receiving entity's receipt of a file. Should the sending entity not receive an acknowledgement file within 5 minutes of sending a file to the target entity, the sending entity will contact the target entity to notify them that they did not receive a response after the file was transmitted.

File Naming Conventions:

Acknowledgement Files will use the following naming conventions based on the success or failure of the file transfer.

Successful Transmission:

If a file's checksum and record count are verified as correct by the receiving entity, the receiving entity will send an Acknowledgement File to the sending entity. The Acknowledgement File will use the following naming scheme:

(original file name.zip)_**TxDOT_ack**

Unsuccessful Transmission:

If a file's checksum or record count cannot be verified as correct, the receiving entity will create an Acknowledgement File that specifies that the transmission of the file was not successful. The receiving entity will specify that the file transfer failed by utilizing the following file naming scheme:

(original file name.zip)_**TxDOT_nack**

4.7.1 Acknowledgement File Transfer

Acknowledgement files will be sent for the following file types:

- Video Trip Lockbox File
- Tag Holder Lockbox File
- E-Returns Video Trip Lockbox File
- E-Returns Tag Holder Lockbox File
- Reporting Video Trip Lockbox File
- Reporting Tag Holder Lockbox File

4.7.2 File Format

The files involved in the file transfer that are described in this document are XML Version 1.0 files. Every field making up each file type will have a defined XML tag that will be used to define the field and structure the XML document / fil

Appendix 1 Standard Return Reason Codes

Code	Description	Code	Description
01	NSF (Insufficient Funds)	**13**	Account Frozen
02	Stop Payment	**14**	Two Signatures Required
03	Account Closed	**15**	Signatures Disagree
04	Refer to Maker	**16**	Signature Not Authorized
05	No Reason	**17**	Unavailable Funds
06	Endorsement Missing	**18**	Payee Missing
07	Signature Missing	**19**	Check Altered
08	Other	**20**	Amounts Differ
09	Uncollected Funds	**21**	End Not As Drawn
10	Stale Date	**22**	End Irregular
11	Post Date	**23**	Personal End Required
12	Account Not On File	**24**	NSF 2nd Time