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OVERVIEW

Removal Items have different documentation requirements for each unit of measure (UOM). All Removal Items must be counted, measured, and/or calculated prior to or during removal. Documentation examples for a few selected Removal Items are illustrated in this chapter. Some minor modifications may be required to show the unusual circumstances that may occur with different items, but the general format should be followed. If there are items which cannot be documented according to the following examples, contact the Construction Admin Services Section for assistance.

INSPECTOR'S RESPONSIBILITIES – REMOVAL ITEMS

- Use the Agreement Estimate report as a reference to ensure that items and quantities are paid in the correct category (AEB).
- Use the Structure List-Removals list (Figure 5-1) and/or the Main Structure list, located in the Contract plans, to help identify items, quantities, descriptions and locations.

						FED. RD. STATE PROJECT NO. 9 NEVADA STP-0160(016)	COUNTY SHEE NO CLARK R-0
REMOVE & RESET GUARDRAIL REMOVAL OF FENCE	REMOVAL OF COMPOITE SURFACE	REMOVE & RESET CHAIN-LINK FENCE	REMOVE & RESET GUARDRAIL END TREATMENT	REMOVE END SECTION	REMOVAL OF TREES (6-INCHES TO 12-INCHES)	STRUCTURE LIST-RE	EMOVALS
202 2020 F	202 1184	202 1056 F	202 0417 F	202 0076 F	201 0512 F	DESCRIPTION	STATION TO STATION
 LINFT LINFT							
					1	REMOVAL OF TREES (6-INCHES TO 12-INCHES) (LT.)	"BD" 56+72.94
 		500			-	REMOVE & RESET CHAIN-LINK FENCE (LT.)	"BD" 57+63.45
		000				REMOVE & RESET CHAIN-EINR PENCE (E1.)	"BD" 62+63.45
				1		REMOVE END SECTION (88.44' LT.)	"BD" 57+89.98
				1	_	DEMOVE END RECTION (AS 44) DT)	1001 F7:00 44
 			-	1	-	REMOVE END SECTION (85.41' RT.)	"BD" 57+98.14
	1	200				REMOVE & RESET CHAIN-LINK FENCE (RT.)	"BD" 58+90
							"BD" 60+90
	-	100				REMOVE & RESET CHAIN-LINK FENCE (LT.)	"BD" 61+00 "BD" 62+00
		-			-		00 02+00
				1		REMOVE END SECTION (80.15' RT.)	"Pe" 62+29.53
		_	1			REMOVE & RESET GUARDRAIL END TRATMENT (LT.)	"LNe" 363+20.47
			1			REMOVE & RESET GUARDRAIL END TRATMENT (LT.)	"LNe" 367+32.02
							BAR 030. 50 TO
 600						REMOVE & RESET GUARDRAIL (LT.)	"W" 370+50 TO "W" 376+50
			-				VI 3/0730

Figure 5-1: Example of a Structure List - Removals

- Review the following for accuracy:
 - Supplemental Notices
 - Special Provisions
 - Change Orders
- Turn in ALL Removal Item calculation sheets to the Office Engineer.

DAILY WORK REPORT (DWR) - MOBILE INSPECTOR

- 1. Create a DWR in Mobile Inspector daily to document the activity being monitored. Refer to the <u>Mobile Inspector User Guide</u> for details on using this application.
 - Report Details daily activities
 - Item Postings item(s) and quantity(s)
 - Equipment type, number and hours used
 - Personnel title and hours
- 2. Record the following required information in the Report Details window (Figure 5-2):
 - Date

5

- Weather
- Low Temp and High Temp
- Attachments: (N/A) Send ALL photos via email.
- Remarks: Select the appropriate Remark Type. Verify with the Resident Engineer on what information is required.

_	Report Details
Date:	Fri, 06/07/2019 🔻
Weather:	05 🗸
Low Temp:	35
High Temp:	68
Rainfall Amt:	
Attachments:	0
Remarks:	GENERAL
embankment protecto Contractor started 3pm. Spoke with Q&D Con	T. Remove existing Type 5-2G or and 12" down drain. working at 7am and ended at struction foreman, Clayton on all posting quantities.
	3767 remaining

Figure 5-2: DWR Report Detail Window

- 3. Record the following required information in the New Item Postings window:
 - Item: Select the appropriate Project/Catg., if item is in more than one Project/Catg. Refer to the AEB report.
 - Contractor: ALWAYS the Prime Contractor (Subs are not allowed).
 - Qty: Based on measurements, calculations and/or counts (CANNOT PAY PLAN!).
 - Material Set: Select appropriate value (if applicable)
 - Location: Line Designation
 - Station From/To: Refer to Contract plans.
 - Offset Type: Enter the LT, RT, or CL.
 - Offset Dist.: Enter if known.
 - **Comments**: Must show calculations when appropriate, refer to Calculation Sheet when appropriate (refer to Appendix B, Calculation Formulas, in this Manual for a Calculation Sheet example), other information relevant to item posting, and explanations when Attention Flag is checked.
 - Attention Flag: Use to bring attention to Resident Engineer and Office Engineer for overruns and plan errors. Must enter Attention Comments.

NOTES for Removal Item postings:

- If an each item has a specific location/station callout in the plans, then a separate posting will be done. It should NOT be grouped in a posting.
- If each items do NOT have a location/station callout but are grouped in a table or structure list, then they can be combined in one posting.
- Refer to Figure 5-3 through Figure 5-9 for examples of removal item postings with different UOM.

Item:	REMOVAL OF COMPOS
Contractor:	Q&D CONSTRUCTION I
Qty:	154.44 CUYE
Authorized: Total Posted:	162.500 CUYE 0.000 CUYE
Location:	"RW"
Station From:	52 + 43
Offset Type:	RT
Offset Dist:	
Station To:	65 + 93
Offset Type:	RT
Offset Dist:	
Measured:	
Comments:	
1000 x 5.56 X .75/	27 = 154.44

Figure 5-3: DWR Item Posting - Remove CUYD

Item:	REMOVE AND RESET L
Contractor:	Q&D CONSTRUCTION I
Qty: Authorized: Total Posted:	.50 EAC 10.000 EAC 6.000 EAC
Location:	"BW" 202+51
Station From: Offset Type: Offset Dist:	+ RT
Station To: Offset Type: Offset Dist:	+
Measured: Comments:	
Paid half for remov	valonly

Figure 5-4: DWR Item Posting - Remove LFT

NOTES for Removal CUYD/CUFT (Figure 5-3):

- Payment for CUYD and CUFT items will be based on field measure and calculations.
- Calculations for CUYD = L x W x D ÷ 27
- Calculations for CUFT = L x W x D
- Location: Enter the Line Designation
- Station From/To: Refer to Contract plans
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

NOTES for Remove & Reset EACH (Figure 5-4):

- Payment for Removal and Reset EACH items will be based on a field count at a Location.
- Pay .5 when item is Removed and .5 when it's Reset.
- Location: Enter the Line Designation and Station
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Comments: Indicate whether it is a removal or reset.

5

Item:	REMOVE END SECTION -
Contractor:	Q&D CONSTRUCTION I
Qty: Authorized: Total Posted:	1.00 EACH 3.000 EACH 0.000 EACH
Location:	"CW" 202+51
Station From: Offset Type: Offset Dist:	+ LT 88.95'
Station To: Offset Type: Offset Dist:	+
Measured: Comments:	E

Figure 5-5: DWR Item Posting - Removal EACH

	New Item Posting
Item:	REMOVE PAVEMENT M 💙
Contractor:	Q&D CONSTRUCTION I 💙
Qty:	82 EACH
Authorized: Total Posted:	70.000 EACH 0.000 EACH
Location:	"BW"
Station From:	359 + 68
Offset Type: Offset Dist:	RT
Station To: Offset Type: Offset Dist:	366 + 90 RT
Measured: Comments:	~
counted	
	3990 remaining
Attention: Attention Comments	•
Additional qty. ac	lded per CO #3
	225 remaining

Figure 5-6: DWR Item Posting - Combined EACH

NOTES for Removal EACH (Figure 5-5):

- Payment for Removal EACH items will be based on a field count at a Location.
- Location: Enter the Line Designation and Station
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

NOTES for Combined EACH (Figure 5-6):

- Payment for Combined EACH items will be based on field count from Station to Station.
- Location: Enter the Line Designation
- Station From/To: Refer to Contract plans
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

Item:	REMOVAL OF FI	ENCE
Contractor:	Q&D CONSTRUCT	ION I 🦷
Qty:		334.00 LF
Authorized: Total Posted:		355.000 LF 0.000 LF
Location:	"TW"	
Station From:	130	+ 21.24
Offset Type:		RT
Offset Dist:	76.3'	L.
Station To:	133	+ 75.05
Offset Type:		RT
Offset Dist:	77.4'	
Measured:		٧
Comments:		
Actual Length measured.	Item Complete.	

Figure 5-7: DWR Item Posting - Remove LFT

	New Item Posting
Item:	REMOVAL OF BITUMIN
Contractor:	Q&D CONSTRUCTION I
Qty:	0.13 MILE
Authorized: Total Posted:	500.000 MILE 0.000 MILE
Location:	"RW"
Station From:	4 + 00
Offset Type:	RT
Offset Dist:	
Station To:	10 + 90
Offset Type:	RT
Offset Dist:	
Measured:	
Comments:	here a second
Meas. LFT = 690/52	280 = .13 Mile
	3968 remainir

Figure 5-8: DWR Item Posting - Removal MILE

Notes for Removal LFT (Figure 5-7)

- Payment for LFT items will be based on field measurement.
- Location: Enter the Line Designation
- Station From/To: Refer to Contract plans
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01
- Add a Comment when the item is completed.

NOTES for Removal MILE (Figure 5-8):

- Payment for Mile and Station Items will be based on field measure and calculations.
- Reference the Summary of Base and Surface Quantities and the Typical Sections (2 sheets) within the Contract plans.
- Calculations for mile = LFT ÷ 5280 (always use this number)
- Calculations for sta. = LFT ÷ 100 (always use this number)
- In Location, enter the Line Designation
- In Offset Type, enter the LT, RT, or CL.
- In Station From/To, refer to Contract plans
- Offset Dist., enter if known
- Sig. Fig. = .01

5

New Iter	m Posting	
Item:	REMOVAL OF BITUMIN 🔻	1
Contractor:	Q&D CONSTRUCTION I 🔻	
Qty: Authorized: Total Posted: Location:	651.84 SQYD 342,862.000 SQYD 0.000 SQYD	NOTE • Pa m
Station From: Offset Type: Offset Dist:	"CW" ramp 39 + 55.6 LT	• Cá • Ré Qi tra
Station To: Offset Type: Offset Dist:	42 + 50 LT	qu • Lo • St
Measured: Comments:		• 01 • 01
293.33 X 20 / 9 = 651.84		• Si
	3975 remaining	

NOTES for Removal SQYD (Figure 5-9):

- Payment for SQYD items will be based on field measurement.
- Calculations for SQYD = (L X W) ÷ 9
- Reference the Summary of Base and Surface Quantities and the Paving Plan sheets in the Contract plans for removal of bituminous surface quantities.
- Location: Enter the Line Designation
- Station From/To: Refer to Contract plans
- Offset Type: Enter the LT, RT, or CL.
- Offset Dist: Enter if known
- Sig. Fig. = .01

Figure 5-9: DWR Item Posting - Removal SQYD

- 4. Record the following required information in the New Equipment window (Figure 5-10 and Figure 5-11):
 - **Contractor**: Actual contractor performing the work (include subs).
 - Type: Select from the Equipment list
 - **Used**: How many of each type.
 - Hours Used: Total hours in use.
 - Comments: Details of the type of equipment (e.g., diesel, HP, model, make). Include equipment attachment information if applicable.

New	Equipment
Contractor:	LAS VEGAS PAVING C 🔻
Туре:	LOADER / BACKHOE / 🔻
Used:	1
On Site:	
Hours Used:	8
Hours Idle:	
Comments:	
-	r, Diesel, 82HP, 1350lbs attachment, 15C w/12" bit
	506 remaining
•	*

Figure 5-10: DWR Equipment Entry



Figure 5-11: DWR Equipment List

- 5. Record the following required information in the New Personnel window (Figure 5-12 and Figure 5-13):
 - Contractor: Actual contractor performing the work (include subs).
 - Type: Select from the Personnel list.
 - Number: How many of each title.
 - Total Hours: Total hours worked.
 - Comments: Details of personnel type (e.g., foreman w/name, laborer, truck driver).

New P	ersonnel	
Contractor:	LAS VEGAS PAVING C.	
Personnel:	LABORER FOREMAN	-
Employee:	N/A	
Decision Class:	Select	-
Number:		1
Total Hours:		8
Comments:		
Foreman - Cody Bellinger		
	3975 re	mainin
<	*	malfill

Figure 5-12: DWR Personnel Entry

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Figure 5-13: DWR Personnel List

6. Complete a final review of the DWR, lock the report, and Sync Data.

Note: When the Sync Data process has completed, the information is uploaded into an AWP DWR, where it is reviewed and Approved for processing progress payments.

DAILY WORK REPORT (DWR) - AWP EDITS

The Officer Engineer reviews each Inspector's DWRs for required entries and accuracy. If edits are needed on a DWR, the Inspector who created it may be required to log into the AWP program on a computer (not the iPAD) and complete the edits. Refer to Chapter 5, Daily Work Reports, Section, Editing a Mobile Inspector DWR, in the <u>AWP User Guide With Materials</u> for details.

OFFICE ENGINEER'S RESPONSIBILITIES – REMOVAL ITEMS

- Save Removal Item photos in the appropriate Contract Files\Contract\03 Multimedia\3.# Photos directory.
- Review removal item calculation sheets for accuracy and save electronically in the appropriate Contract Files\Contract\07 Estimates\7.# Calc Sheets directory using this naming convention: DWR YYYY-MM-DD Inspectors Initials, (e.g. DWR 2016-03-19 KMM).
- Distribute executed copies of Change Orders to Inspectors.

DAILY WORK REPORT (DWR) - AWP

When a Mobile Inspector DWR is locked by an Inspector, the information is uploaded into an AWP DWR. Refer to Chapter 5, Daily Work Reports, Section, Reviewing a DWR from Mobile Inspector, in the AWP User Guide With Materials for details.

- Verify the following:
 - Information in the Remarks
 - Information in the Contractor On Site tab
 - Information in the Contractor Equipment tab



- Information in the Contractor Personnel tab
- Items are paid correctly according to the contract documents (e.g., plans, supplemental notices, Change Orders).
- · Item quantities
- Quantities in postings are documented to the correct Significant Figure (.01)
- Material Set is correct.
- Stations and Line Designations in the Locations
- Calculations are correct.
- Comments reference calculation sheets, if applicable.

Note: Length does not always equal the difference between the beginning and ending station. Sometimes there is a curve or an obstacle that will affect the distance. Always check with the Inspector before assuming the calculations are incorrect.

- Approve the DWR if everything is correct.
- If there are edits required, the Office Engineer may complete them and add a DWR Note with their name, date, and details of the correction. The DWR can then be Approved.
- If there are edits which need to be completed by the Inspector who created the DWR, the Inspector will be required to log into the AWP program on a computer (not the iPAD) to complete the edits.
- Review the edited DWR and Approve.