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## OVERVIEW

Landscape and Irrigation Items have different documentation requirements for each unit of measure (UOM). All Landscape and Irrigation Item quantities must be counted, measured, calculated or based on plan. Documentation examples for a few selected Landscape and Irrigation 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 – LANDSCAPE AND IRRIGATION 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-Landscaping list (Figure 7-1) and/or the Main Structure list, located in the Contract plans, to help identify
  items, quantities, descriptions and locations.



#### Figure 7-1: Example of a Structure List- Landscape and Irrigation

- Review the following for accuracy:
  - Special Provisions
  - Supplemental Notices
  - Contract Modifications

**Note:** When any changes are made to an item, reference the Contract Modification number in the IDR item posting remarks.

Turn in ALL Landscape and Irrigation Item calculation sheets to the Office Engineer.

### INSPECTOR DAILY REPORT (IDR) - MOBILE INSPECTOR

- Create an IDR 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 and hours
  - Personnel title and hours
- 2. Record the following required information in the Report Details window (Figure 7-2):

#### Date

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- Weather
- · Low and high temperature
- Attachments (N/A) Send ALL photos via email.
- Remarks Verify with the Resident Engineer on what information is required.

f		m
Date:	Th	u, 12/22/2016 🛛 🔻
Weather:	C	old & Windy
Low Temp:		35 °F
High Temp:		°F
Attachments:		0
Remarks:		
"LNE" 354 + 10 to ' items.	'LNE" 362 + 00 - Land	scaping and Irrigation
Contractor started	working at 7am with fe	rtilizing and installing
foreman about the	increase of quality for	Tonsoil

#### Figure 7-2: IDR Report Detail Window

- 3. Record the following required information in the New Item Postings window:
  - Item
  - Proj/Catg Refer to the AEB report.
  - Contractor ALWAYS the Prime Contractor (Subs are not allowed).
  - Qty-Based on measurements, calculations, counts and/or plan.
  - Location Must show line designation, LT, RT or CL and offset if known.
  - Station From/To Refer to Contract plans.
  - Attention Flag Use to bring attention to Resident Engineer and Office Engineer for overruns and plan errors.
  - Remarks 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.

NOTES for Landscape and Irrigation Item postings:

- If there are questions on whether an EACH item can be listed separately or combined, contact the Construction Admin Services Section for assistance.
- Refer to Figure 7-3 through Figure 7-11 for examples of landscape and irrigation item postings with different UOM.

## 7-4

Item:	SITE PREPARATION		
Proj/Catg:	60638C2C, 08, Landscape &		
Contractor:	LAS VEGAS PAVING CORP		
Qty:	.149 ACRI		
Location:	"LNE" RT		
Station From:	354 + 10		
Station To:	362 + 22		
Attention Flag:			
Remarks:			
100' x 65' / 43560 = .149			

Figure 7-3: IDR Item Posting - Landscape ACRE

Item:	MULCH (WOOD CHIPS)		
Proj/Catg:	60638C2C, 08, Landscape &		
Contractor:	LAS VEGAS PAVING CORP		
Qty:	[18.12] CUY		
Location:	"LNE" RT		
Station From:	354 + 10		
Station To:	362 + 22		
Attention Flag:			
Remarks:			
Paid Plan			
100% Complete			

Figure 7-4: IDR Item Posting - Landscape CUYD

NOTES for Landscape ACRE (Figure 7-3):

- Payment for ACRE item will be based on field measure and Calculations.
- Calculation for ACRE = L x W ÷ 43560 (always use this number).
- In Location, enter the Line Designation and LT, RT, or CL.
- Sig. Fig. = .001

NOTES for Landscape CUYD (Figure 7-4):

- Payment for CUYD item will be based on plan quantity or field measure and calculations if different than plan.
- Calculation for CUYD if different than plan = L x W x D ÷ 27.
- In Location, enter the Line Designation and LT, RT, or CL.
- Sig. Fig. = .01

	New Item Posting		
Item:	TOPSOIL		
Proj/Catg:	60638C2C, 08, Landscape &		
Contractor:	LAS VEGAS PAVING CORP		
Qty:	72.00 CUY		
Location:	"LNE" RT		
Station From:	354 + 30		
Station To:	358 + 00		
Attention Flag:			
Remarks:			
Truck # 23 Number of Lc 9 x 4.5 x 6 / 27 = 9 9 x 8 = 72.00	bads = 8		

NOTES for Landscape CUYD by Truck (Figure 7-5):

- Payment for CUYD delivered by a truck that isn't weighed over a scale will be based on field measure and calculations.
- Calculation for CUYD delivered by a truck that isn't weighed over a scale = L x W x D ÷ 27 x the # of loads.
- The calculations show the capacity for each truck. Multiply the number of loads by the truck capacity to get CUYD's.
- In Location, enter the Line Designation and LT, RT, or CL.
- State the Truck Number and Number of Loads.

NOTES for Landscape EACH Combined (Figure

· Payment for EACH item will be based on field

In Location, enter the Line Designation and LT,

• This shows an EACH item combined.

• Sig. Fig. = .01

7-6)

•

count.

RT, or CL. • Sig. Fig. = 1

Item:	PLANTS (GROUP A-5)		
Proj/Catg:	60604C2C, 03, LANDSCAPI		
Contractor:	ROAD & HIGHWAY BUILDE		
Qty:	95 EAC		
Location:	"LN" RT		
Station From:	354 + 10		
Station To:	359 + 50		
Materials:			
Attention Flag:			
Remarks:			
Complete			

Figure 7-5: IDR Item Posting – Landscape CUYD by Truck

Figure 7-6: IDR Posting - Landscape EACH Combined

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Item:	FERTILIZER	
Proj/Catg:	60638C2C, 08, Landscape & .	
Contractor:	LAS VEGAS PAVING CORP	
Qty:	[ 110 G	
Location:	"LNE" RT	
Station From:	354 + 10	
Station To:	355 + 20	
Attention Flag:	•	
Remarks:	-	
2 Drums @ 55 = 110 ga See email: IDR 2016-12	l. -10 KMM for container label.	

Figure 7-7: IDR Item Posting - Landscape GAL

Item:	1/2-INCH POLYVINYL CH		
Proj/Catg:	60638C2C, 08, Landscape & .		
Contractor:	LAS VEGAS PAVING CORP		
Qty:	[LF		
Location:	"LNE" RT		
Station From:	354 + 10		
Station To:	360 + 10		
Attention Flag:			
Remarks:	L.		
Complete			

Figure 7-8: IDR Item Posting – Landscape LFT

#### NOTES for Landscape GAL (Figure 7-7):

- Payment for GAL items will be based on field measurements and calculations.
- Calculations will consist of counting the drums used or measuring the container and calculating the quantity when a full drum is not used. If measured by another device show the calculations on how gallons were derived.
- A picture of a label must be taken and emailed to the Office Engineer for backup to confirm the quantity of the container.
- In Location, enter the Line Designation and LT, RT, ot CL.
- Check the Attention Flag to notify the Office Engineer there's an email regarding this Item Posting.
- Sig. Fig. = 1

NOTES for Landscape LFT (Figure 7-8):

- Payment for LFT items will be based on field measurements.
- In Location, enter the Line Designation and LT, RT, or CL.
- Sig. Fig. = 1

Item:	FERTILIZER (COMMERCI		
Proj/Catg:	60638C2C, 08, Landscape &		
Contractor:	LAS VEGAS PAVING CORP		
Qty:	[ 100 ] L		
Location:	"LNE" RT		
Station From:	354 + 10		
Station To:	359 + 50		
Attention Flag:	•		
Remarks:			
4 bags @ 25 lbs. ea. = See email: IDR 2017-1-	100 lbs. 20 CAW for label.		

NOTES for Landscape LB (Figure 7-9):

- Payment for POUND (LB) items will be based on plan quantity or field measurements and calculations if different than plan.
- A picture of a label must be taken and emailed to the Office Engineer for backup to confirm the quantity of the container.
- In Location, enter the Line Designation and LT, RT, or CL.
- Check the Attention Flag to notify the Office Engineer there's an email regarding this Item Posting.
- Sig. Fig. = 1

Figure 7-9: IDR Item Posting – Landscape LB

ltem:	ROCK WALL		
Proj/Catg:	60638C2C, 08, Landscape &		
Contractor:	LAS VEGAS PAVING CORP		
Qty:	4480.00 SQF		
Location:	"LNE" RT		
Station From:	355 + 45		
Station To:	358 + 65		
Attention Flag:			
Remarks:	_		
$220 \times 14 - 4490.00$			

Figure 7-10: IDR Item Posting – Landscape SQFT

NOTES for Landscape SQFT (Figure 7-10):

- Payment for SQFT item will be based on field measure and Calculations.
- Calculation for SQFT = L x W
- In Location, enter the Line Designation and LT, RT, or CL.
- Sig. Fig. = .01

Item:	PAINTING		
Proj/Catg:	60638C2C, 08, Landscape		
Contractor:	LAS VEGAS PAVING CORP		
Qty:	866.7 SQYE		
Location:	"LNE" RT		
Station From:	354 + 90		
Station To:	360 + 10		
Materials:			
Attention Flag:			
Remarks:			
529 x 15 / 9 = 866.7			

NOTES for Landscape SQYD (Figure 7-11):

- Payment for SQYD item will be based on field measure and Calculations.
- Calculation for SQYD = L x W ÷ 9
- In Location, enter the Line Designation and LT, RT, or CL.
- Sig. Fig. = .1

Figure 7-11: IDR Item Posting – Landscape SQYD

- 4. Record the following required information in the New Equipment window (Figure 7-12 and Figure 7-13):
  - Contractor Actual contractor performing the work (include subs)
  - Type Detailed description of the equipment (e.g., diesel, HP, model, make)
  - Number How many of each type.
  - Hours Total hours in use.

Note: An attachment to an equipment's base configuration must have its own record.

Contractor:	LAS VEGA	AS PAVI *
Туре:	Bobcat 256	6C Skid 🦷
Number:	-22	1
Hours:		8

Figure 7-12: IDR Equipment Entry



#### Figure 7-13: IDR Equipment List

- 5. Record the following required information in the New Personnel window (Figure 7-14 and Figure 7-15):
  - Contractor Actual contractor performing the work (include subs)
  - Type Details of personnel type (e.g., foreman, laborer, truck driver)
  - Number How many of each title.
  - Hours-Total hours worked.

	New	Personnel	
Contractor:		LAS VEGAS PAVING CO	
Туре:	Foreman - Donald Driver		
Number:			1
Hours:			8
	•	×	

#### Figure 7-14: IDR Personnel Entry

	Add Personnel	
LAS VEGAS PAVIN	G CORPORATION	
Foreman - Donald D	river	
Number: 1.00	Hours: 8.00	
LAS VEGAS PAVIN	G CORPORATION	
Laborer		
Number: 3.00	Hours: 8.00	
LAS VEGAS PAVIN	G CORPORATION	
Operator		
Number: 2.00	Hours: 8.00	

#### Figure 7-15: IDR Personnel List

6. Complete a final review of the IDR and lock it.

**Note:** When a Mobile Inspector IDR is completed and locked the information is uploaded into a FieldManager IDR, where it is reviewed and generated for processing progress payments.

## OFFICE ENGINEER'S RESPONSIBILITIES – LANDSCAPE AND IRRIGATION ITEMS

- Collect all Material Certifications. Scan and save them to the appropriate EDOC Contract Files\Material and Testing Files\Division No. 4 Materials Division Certs and Test Reports\4.# directory. Send original certifications to the Materials Division for approval.
- Save Landscape and Irrigation Item photos in the appropriate EDOC Contract Files\Contract Files\Division No. 3 Multimedia Records\3.# Photographs with Descriptions directory.
- Review Landscape and Irrigation Item calculation sheets for accuracy and save electronically in the appropriate EDOC Contract Files\Contract Files\Division No. 7 - Construction Pay Estimate and Related Data\7.# IDR Calculation Sheets directory using this naming convention: IDR YYYY-MM-DD Inspectors Initials, (e.g. IDR 2017-03-19 KMM).
- Approve materials in FieldManager when the approved material certifications are received from the Materials Division. Refer to Chapter 6, Working with Materials, in the FieldManager User Guide, for details.
- Distribute executed copies of Contract Modifications to Inspectors.

## INSPECTOR DAILY REPORT (IDR) - FIELDMANAGER

When a Mobile Inspector IDR is locked by an Inspector, the information is uploaded into a FieldManager IDR. Refer to Chapter 7, Inspector Daily Report, in the FieldManager User Guide for details.

- 1. Verify the following:
  - Information in the Comments and Remarks
  - Information in the Contractor tab (Personnel and Equipment)
  - Items are paid correctly according to the contract documents (e.g., plans, supplemental notices, Contract Modifications).
  - Item quantities
  - Quantities in postings are documented to the correct Significant Figure
  - Stations and Line Designations in the Locations
  - Calculations are correct
  - Remarks 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.

2. Generate the IDR.