

Report No. 1

Name of Road West Point-Crowell

Paving Grading Contractor Peterson, Shirley & Gunther Bridge Contractor

Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Project No. 88-C

County Cuming

Week Ending 7-15-22

STATIONS

1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 0.0 Grading 0.0 Surfacing 0.0 Culverts 0.0 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges Pavement Guard Rail Tile Ditch Checks Surfacing

Working Force and Equipment Now in Use

GRADING

CULVERT

Number

No. of
Hours
UsedRate
per
Hour

Number

No. of
Hours
UsedRate
per
Hour

Foreman

Laborers

Cooks

Head of Stock

Tractors

Elevating Graders

Blade Graders

Dump Wagons

Trucks

Fresnos

Slips

Plows

Conc. Mixers

Culverts Completed During Week

STATION

SIZE

LENGTH

KIND

Total No. lineal feet culvert pipe
installed to dateTotal No. cu. yds. box culverts
installed to dateTotal No. cu. yds. headwalls
installedNo. miles of project completed
under Co. maintenance

Engineering Force

NAME

RANK

Alfred L. Ogle Proj. Engr.

E. P. Clements Rodman.

F. E. Corrick Chairman.

OFFICIAL VISITORS

NAME

DATE

M. F. Black 7-14-22.

Alfred L. Ogle In Charge
West Point, Nebr.
Address Tel. No. 273.

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 2

DEPARTMENT OF PUBLIC WORKS

Project No. 88-CName of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County CumingPaving Contractor Peterson, Shirley & Gunther Bridge ContractorWeek Ending 7-22-22Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.

STATIONS

1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 0.0 Grading 0.0 Surfacing 0.0 Culverts 0.0 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges Pavement Guard Rail Tile Ditch Checks Surfacing

Working Force and Equipment Now in Use

GRADING

CULVERT

Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman					
Laborers					
"					
Cooks					
Head of Stock					
Tractors					
Elevating Graders					
Blade Graders					
Dump Wagons					
Trucks					
Fresnos					
Slips					
Plows					
Conc. Mixers					

Culverts Completed During Week

STATION SIZE LENGTH KIND

Total No. lineal feet culvert pipe installed to date

Total No. cu. yds. box culverts installed to date

Total No. cu. yds. headwalls installed

No. miles of project completed under Co. maintenance

Engineering Force

NAME RANK

Alfred L. Ogle Proj. Engr.

E. P. Clements Rodman.

F. E. Corrick Chainman.

OFFICIAL VISITORS

NAME DATE

In Charge

Address West Point, Nebr. Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 3

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-CName of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County CumingPaving Grading Contractor Peterson, Shirley & Gunther Bridge ContractorWeek Ending 7-29-22Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.

STATIONS

1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 0.0 Grading 0.0 Surfacing 0.0 Culverts 0.0 Bridges None Guard Rail

Ditch Checks

Check Work Not Started by Contractor—Bridges

Pavement

Guard Rail

Tile

Ditch Checks

Surfacing

Working Force and Equipment Now in Use

GRADING

CULVERT

Number

No. of
Hours
UsedRate
per
Hour

Number

No. of
Hours
UsedRate
per
Hour

Foreman

Laborers

"

Cooks

Head of Stock

Tractors

Elevating Graders

Blade Graders

Dump Wagons

Trucks

Fresnos

Slips

Plows

Conc. Mixers

Culverts Completed During Week

STATION

SIZE

LENGTH

KIND

Total No. lineal feet culvert pipe
installed to dateTotal No. cu. yds. box culverts
installed to dateTotal No. cu. yds. headwalls
installedNo. miles of project completed
under Co. maintenance

Engineering Force

NAME

RANK

Alfred L. Ogle Proj. Engr

E. P. Clements Rodman,

F. E. Corrick Chainman.

OFFICIAL VISITORS

NAME

DATE

M. F. Black 7-28-22.

M. F. Black 7-26-22.

Alfred L. Ogle In Charge
 West Point, Nebr.
 Address _____ Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 4

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming.

Paving Contractor Peterson, Shirley & Gunther **Bridge Contractor** _____ **Week Ending** 8-5-22.

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

STATIONS					
	$1'' = 100 \text{ Stations or}$ $1'' = 200 \text{ Stations}$				
Accepted by State					
Final Cross Sections					
Surfacing Placed					
Surfacing Finished					
Finished Grading					
Finishing Stakes					
Rough Grading	14-A 26-A				
Slope Stakes	26-A				
Preliminary Cross Sections	60-A				
Center Line Stakes	60-A 65 90 102 170				

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 1.0 Grading 2.0 Surfacing 0.0 Culverts 0.0 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	25	0.30								Alfred L. Ogle	Proj. Engr.
Laborers	4	100	0.25								E. P. Clements	Rodman.
"											F. E. Corrick	Chainman.
Cooks												
Head of Stock	10	250										
Tractors											OFFICIAL VISITORS	
Elevating Graders											NAME	DATE
Blade Graders							Total No. lineal feet culvert pipe installed to date					
Dump Wagons												
Trucks							Total No. cu. yds. box culverts installed to date					
Fresnos	3	75										
Slips	1	25					Total No. cu. yds. headwalls installed					
Plows	1	25										
Conc. Mixers							No. miles of project completed under Co. maintenance				<i>Alfred L. Ogle</i>	In Charge
											West Point, Nebr	
											Address	Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 5

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C.

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming.

Paving Grading Contractor Paterson, Shirley & Gunther Bridge Contractor **Week Ending** 8-12-22.

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 2.5 Grading 5.0 Surfacing 0.0 Culverts 0.0 Bridges None Guard Rail Ditch Checks.

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use						Culverts Completed During Week				Engineering Force		
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	60	0.30								Alfred L. Ogle	Proj. Engr.
Laborers	4	240	0.25								E. P. Clements	Rodman.
"											F. E. Corrick	Chairman.
Cooks												
Head of Stock	10	600										
Tractors												
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date				W. F. Hart	8-9-22
Dump Wagons											M. F. Black	8-9-22
Trucks							Total No. cu. yds. box culverts installed to date					
Fresnos	2	120										
Slips							Total No. cu. yds. headwalls installed					
Plows	1	60									<i>Alfred L. Ogle</i>	In Charge
Conc. Mixers							No. miles of project completed under Co. maintenance				West Point, Nebr	
											Address	Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 6

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 8-19-22.

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 3.5 Grading 7.0 Surfacing 0.0 Culverts 0.0 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges.

Pavement

Guard Rail

Tile

Ditch Checks

Surfacing

Working Force and Equipment Now in Use

	GRADING			CULVERT		
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	60	0.30			
Laborers	4	240	0.25			
"						
Cooks						
Head of Stock	10	600				
Tractors						
Elevating Graders						
Blade Graders						
Dump Wagons						
Trucks						
Fresnos	2	120				
Slips						
Plows	1	60				
Conc. Mixers						

Culverts Completed During Week

[illegible]

Engineering Force

NAME		RANK
Alfred L. Ogle	Proj. Engr.	
E. P. Clements	Rodman.	
F. E. Corrick	Chairman.	
OFFICIAL VISITORS		
NAME		DATE
M. F. Black	8-16-22.	
In Charge		
West Point, Nebr.		
Address		Tel. No. 273

Address

Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 7

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-CName of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County CumingPaving Grading Contractor Peterson, Shirley & Gunther Bridge ContractorWeek Ending 8-26-22Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.STATIONS
1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 4.6 Grading 9.0 Surfacing 0.0 Culverts 0.0 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges Pavement Guard Rail Tile Ditch Checks Surfacing

Working Force and Equipment Now in Use

GRADING

CULVERT

	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	60	0.30			
Laborers	4	240	0.25			
"						
Cooks						
Head of Stock	10	600				
Tractors						
Elevating Graders						
Blade Graders						
Dump Wagons						
Trucks						
Fresnos	2	120				
Slips						
Plows	1	60				
Conc. Mixers						

Culverts Completed During Week

STATION SIZE LENGTH KIND

Total No. lineal feet culvert pipe installed to date

Total No. cu. yds. box culverts installed to date

Total No. cu. yds. headwalls installed

No. miles of project completed under Co. maintenance

Engineering Force

NAME RANK

Alfred L. Ogle Proj. Engr.

E. P. Clements Rodman.

F. E. Corrick Chainman.

OFFICIAL VISITORS

NAME DATE

Alfred L. Ogle In Charge
 West Point, Nebr.

Address

Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 8

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 9-2-22

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 6.1 Grading 12.0 Surfacing 0.0 Culverts 0.0 Bridges None Guard Rail Ditch Checks.

Check Work Not Started by Contractor—Bridges.

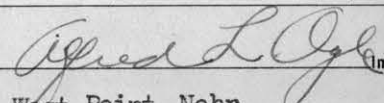
Pavement

Guard Rail

Tile

Ditch Checks

Surfacing

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	60	0.30								Alfred L. Ogle	Prof. Engr.
Laborers	4	240	0.25								E. P. Clements	Rodman.
"											F. E. Corrick	Chairman.
Cooks												
Head of Stock	10	600									OFFICIAL VISITORS	
Tractors											NAME	DATE
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date					
Dump Wagons							Total No. cu. yds. box culverts installed to date					
Trucks							Total No. cu. yds. headwalls installed					
Fresnos	2	120					No. miles of project completed under Co. maintenance					
Slips											 In Charge	
Plows	1	60									West Point, Nebr.	
Conc. Mixers											Address _____ Tel. No. 273	
							NOTE--One copy to Division Engineer and two copies to Lincoln Office.					

Report No. 9

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming.

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 9-9-22.

Culvert Contractor Western Bridge & Constr.Co, **Guard Rail Contractor** Western Bridge & Constr.Co,

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project **7.6** Grading **15.0** Surfacing **0.0** Culverts **0.0** Bridges **None** Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use

	GRADING			CULVERT		
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	60	0.30			
Laborers	4	240	0.25			
"						
Cooks						
Head of Stock	14	840				
Tractors						
Elevating Graders						
Blade Graders						
Dump Wagons						
Trucks						
Fresnos	3	180				
Slips						
Plows	1	60				
Conc. Mixers						

Culverts Completed During Week

[illegible]

Engineering Force

NAME	RANK
Alfred L. Ogle	Proj. Engr.
E. P. Clements	Rodman.
F. E. Corrick	Chainman.
OFFICIAL VISITORS	
NAME	DATE
In Charge	
West Point, Nebr.	
Address	Tel. No. 273

Report No. 10

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C.Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming.Paving Grading Contractor Peterson, Shirley & Gunther Bridge ContractorWeek Ending 9-16-22.Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.STATIONS
1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 14.3 Grading 18.0 Surfacing 0.0 Culverts 3.0 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges Pavement Guard Rail Tile Ditch Checks Surfacing

Working Force and Equipment Now in Use

GRADING

CULVERT

	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	60	0.30	1	60	175
Laborers	4	240	0.25	8	480	0.30
"						
Cooks						
Head of Stock	20	1200				
Tractors						
Elevating Graders						
Blade Graders						
Dump Wagons	3	180				
Trucks	1	60				
Fresnos	3	180				
Slips	1	10				
Plows	2	70				
Conc. Mixers	1	10				
Tank Wagons	1	10				

Culverts Completed During Week

STATION	SIZE	LENGTH	KIND
44-00	4x5	29'	Conc. Box
49-00	24"	52'	Conc. Skew Pipe
Total No. lineal feet culvert pipe installed to date		148	
Total No. cu. yds. box culverts installed to date		22.000	
Total No. cu. yds. headwalls installed		2.91	
No. miles of project completed under Co. maintenance			

Engineering Force

NAME	RANK
Alfred L. Ogle	Proj. Engr.
E. P. Clements	Rodman.

OFFICIAL VISITORS

NAME DATE

West Point, Nebr.

Address

Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 11

DEPARTMENT OF PUBLIC WORKS

Project No. 88-CName of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County CumingPaving Grading Contractor Peterson, Shirley & Gunther Bridge ContractorWeek Ending 9-23-22Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.

STATIONS

1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 25.6 Grading 30.0 Surfacing 0.0 Culverts 60.0 Bridges None Guard Rail

Ditch Checks

Check Work Not Started by Contractor—Bridges Pavement Guard Rail Tile Ditch Checks Surfacing

Working Force and Equipment Now in Use

GRADING

CULVERT

	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	60	0.30	1	60	1.75 Mo.
Laborers	5	300	0.25	5	300	0.30

Cooks

Head of Stock

Tractors

Elevating Graders

Blade Graders

Dump Wagons Tank Wagons

Trucks

Fresnos

Slips

Plows

Conc. Mixers

Culverts Completed During Week

STATION

SIZE

LENGTH

KIND

37-25	30"	56'	Cong. Pipe
57-00	24"	40'	"
43-51	24"	48'	"

Total No. lineal feet culvert pipe installed to date 342

Total No. cu. yds. box culverts installed to date 22

Total No. cu. yds. headwalls installed 11.98

No. miles of project completed under Co. maintenance

Engineering Force

NAME

RANK

Alfred L. Ogle	Proj. Engr
E. P. Clements	Rodman.
G. S. Callahan	Rodman.

OFFICIAL VISITORS

NAME

DATE

Alfred L. Ogle In Charge
 West Point, Nebr. Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 12

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No....88-C

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming

Paving Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 9-30-22.

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

STATIONS					
	$1'' = 100 \text{ Stations or}$				
	$1'' = 200 \text{ Stations}$				
Accepted by State					
Final Cross Sections					
_____ Surfacing Placed					
_____ Surfacing Finished					
Finished Grading					
Finishing Stakes					
Rough Grading					
Slope Stakes					
Preliminary Cross Sections					
Center Line Stakes					

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project	45.6	Grading	59.2	Surfacing	0.0	Culverts	90	Bridges	None	Guard Rail	Ditch Checks
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Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

[illegible]

Report No. 13

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No.... 88-C

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 10-7-22

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 39.1 Grading 35 Surfacing 0.0 Culverts 100 Bridges None Guard Rail _____ Ditch Checks _____

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	60	0.30	1	30	175 Mo.	8-00	18"	28'	Conc. Pipe	Alfred L. Ogle	Proj. Engr
Laborers	5	300	0.25	4	120	0.30	13-60	6'x3'	24'	Conc. Box	E. P. Clements	Rodman
"							21-25	24"	24'	Conc. Pipe	G. S. Callahan	Rodman.
Cooks												
Head of Stock	16	1020		2	60							
Tractors												
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date		342			
Dump Wagons							Total No. cu. yds. box culverts installed to date		40			
Trucks							Total No. cu. yds. headwalls installed		27			
Fresnos	4	240					No. miles of project completed under Co. maintenance					
Slips				1	15							
Plows	1	60										
Conc. Mixers												

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 14

DEPARTMENT OF PUBLIC WORKS

Project No. 88-CName of Road West Point-Wisner

BUREAU OF ROADS AND BRIDGES

County CumingPaving Contractor Peterson, Shirley & Gunther Bridge ContractorWeek Ending 10-14-22Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.STATIONS
1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfing Placed

Surfing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 40.0 Grading 38 Surfing 0.0 Culverts 100 Bridges None Guard Rail

Ditch Checks

Check Work Not Started by Contractor—Bridges

Pavement

Guard Rail

Tile

Ditch Checks

Surfing

Working Force and Equipment Now in Use

GRADING

CULVERT

Number

No. of
Hours
UsedRate
per
Hour

Number

No. of
Hours
UsedRate
per
Hour

Foreman

1

60

0.30

Laborers

5

300

0.25

Cooks

Head of Stock

18

1080

Tractors

Elevating Graders

Blade Graders

Dump Wagons

Trucks

Fresnos

4

240

Slips

Plows

1

60

Conc. Mixers

Culverts Completed During Week

STATION

SIZE

LENGTH

KIND

None

Total No. lineal feet culvert pipe
installed to date 342Total No. cu. yds. box culverts
installed to date 40Total No. cu. yds. headwalls
installed 27No. miles of project completed
under Co. maintenance

Engineering Force

NAME

RANK

Alfred L. Ogle Proj. Engr.

E. P. Clements Rodman.

G. S. Callahan Rodman.

OFFICIAL VISITORS

NAME

DATE

M. F. Black 10-12-22

W. F. Hart 10-12-22

Alfred L. Ogle In Charge

Address West Point, Nebr. Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 15

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County__Cuming

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 10-21-22

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

STATIONS		1" = 100 Stations or		1" = 200 Stations	
Accepted by State					
Final Cross Sections					
_____ Surfacing Placed					
_____ Surfacing Finished					
Finished Grading					
Finishing Stakes					
Rough Grading					
Slope Stakes					
Preliminary Cross Sections					
Center Line Stakes					

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 41.0 Grading 40.0 Surfacing 0.0 Culverts 100 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use

GRADING			CULVERT		
Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
1	60	0.30			
5	300	0.25			
18	1080				
4	240				
1	60				

Culverts Completed During Week

STATION	SIZE	LENGTH	KIND
Total No. lineal feet culvert pipe installed to date		342'	
Total No. cu. yds. box culverts installed to date		40	
Total No. cu. yds. headwalls installed		27	
No. miles of project completed under Co. maintenance			
NOTE--One copy to Division Engineer and two copies to Lincoln O.			

Engineering Force

NAME		RANK
Alfred L.Ogle	Proj.Engr.	
E.P.Clements.	Rodman.	
G.S.Callahan	Rodman.	
OFFICIAL VISITORS		
NAME		DATE
<i>Alfred L Ogle</i>		In Charge
West Point, Nebr.		Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 16

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Project No. 88-C

County Cuming

Week Ending 10-28-22

Name of Road West Point-Crowell

Paying Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

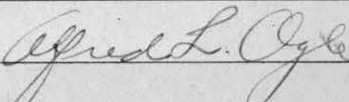
STATIONS	
1" = 100 Stations or	
1" = 200 Stations	
Accepted by State	
Final Cross Sections	
_____ Surfacing Placed	
_____ Surfacing Finished	
Finished Grading	
Finishing Stakes	
Rough Grading	8-A 50-A
Slope Stakes	60
Preliminary Cross Sections	
Center Line Stakes	102 +30

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 42.0 Grading 50.0 Surfacing 0.0 Culverts 100 Bridges None Guard Rail _____ Ditch Checks _____

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
GRADING			CULVERT				STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	60	0.30								Alfred L. Ogle	Proj. Engr.
Laborers	5	300	0.25								E. P. Clements	Rodman.
"											G. S. Callahan	Rodman.
Cooks												
Head of Stock	18	1080									OFFICIAL VISITORS	
Tractors											NAME	DATE
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date	342				
Dump Wagons							Total No. cu. yds. box culverts installed to date	40				
Trucks							Total No. cu. yds. headwalls installed	27				
Fresnos	4	240					No. miles of project completed under Co. maintenance	1.5			 In Charge	
Slips							Address <u>West Point, Nebr</u> Tel. No. <u>273</u>					
Plows	1	60										
Conc. Mixers							NOTE--One copy to Division Engineer and two copies to Lincoln Office.					

Report No. 17

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming

Paving Grading Contractor Peterson, Shipley & Gunther Bridge Contractor

Week Ending 11-4-22

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

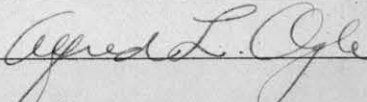
BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 43.7 Grading 52 Surfacing 0.0 Culverts 100 Bridges None Guard Rail _____ Ditch Checks _____

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	20	0.30								Alfred L. Ogle	Proj. Engr.
Laborers	5	100	0.25								E. P. Clements	Rodman.
"											G. S. Callahan	Rodman.
Cooks												
Head of Stock	18	360										
Tractors												
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date	342				
Dump Wagons							Total No. cu. yds. box culverts installed to date	40				
Trucks							Total No. cu. yds. headwalls installed	27				
Fresnos	4	80					No. miles of project completed under Co. maintenance	1.5				
Slips												
Plows	1	20										
Conc. Mixers												

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

 In Charge

Address West Point, Nebr Tel. No. 273

Report No. 18

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C.

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming.

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 11-11-22

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

STATIONS					
	$1'' = 100 \text{ Stations or}$				
	$1'' = 200 \text{ Stations}$				
Accepted by State					
Final Cross Sections					
_____ Surfacing Placed					
_____ Surfacing Finished					
Finished Grading					
Finishing Stakes					
Rough Grading					
Slope Stakes					
Preliminary Cross Sections					
Center Line Stakes					

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 45.2 Grading 55.0 Surfacing 0.0 Culverts 100 Bridges None Guard Rail Ditch Checks.

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use

	GRADING			CULVERT		
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	60	0.30			
Laborers	5	300	0.25			
"						
Cooks						
Head of Stock	18	1080				
Tractors						
Elevating Graders						
Blade Graders						
Dump Wagons						
Trucks						
Fresnos	4	240				
Slips						
Plows	1	60				
Conc. Mixers						

Culverts Completed During Week

[illegible]

Engineering Force

NAME		RANK
Alfred L.Ogle	Proj.	Engr.
E.P.Clements	Rodman.	
G.S.Callahan	Rodman.	
OFFICIAL VISITORS		
NAME		DATE
<i>Alfred L. Ogle</i>		In Charge
Address West Point, Nebr.		Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 19

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C.

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 11-18-22.

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

STATIONS 1" = 100 Stations or 1" = 200 Stations					
Accepted by State					
Final Cross Sections					
Surfacing Placed					
Surfacing Finished					
Finished Grading					
Finishing Stakes					
Rough Grading					
Slope Stakes					
Preliminary Cross Sections					
Center Line Stakes					

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 46.1 Grading 57.0 Surfacing 0.0 Culverts 100 Bridges None Guard Rail _____ Ditch Checks _____

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

[illegible]

Report No. 20

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C.Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming.Paving Grading Contractor Peterson, Shirley & Gunther Bridge ContractorWeek Ending 11-25-22Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.STATIONS
1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 46.7 Grading 58 Surfacing 0.0 Culverts 100 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges Pavement Guard Rail Tile Ditch Checks Surfacing

Working Force and Equipment Now in Use

GRADING

CULVERT

	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	60	0.30			
Laborers	4	240	0.25			
"						
Cooks						
Head of Stock	14	840				
Tractors						
Elevating Graders						
Blade Graders						
Dump Wagons						
Trucks						
Fresnos	3	180				
Slips						
Plows	1	60				
Conc. Mixers						

Culverts Completed During Week

STATION SIZE LENGTH KIND

Total No. lineal feet culvert pipe installed to date 342

Total No. cu. yds. box culverts installed to date 40

Total No. cu. yds. headwalls installed 27

No. miles of project completed under Co. maintenance

Engineering Force

NAME RANK

Alfred L. Ogle Proj. Engr.
E. P. Clements Rodman.
G. S. Callahan. Rodman.

OFFICIAL VISITORS

NAME DATE

W. F. Hart 11-24-22.

Alfred L. Ogle In Charge
Address West Point, Nebr. Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 21

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No......88-C.

Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming.

Paving Grading Contractor Peterson, Shirley & Gunther, Bridge Contractor

Week Ending 12-2-22.

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

STATIONS					
	1" = 100 Stations or				
	1" = 200 Stations				
Accepted by State					
Final Cross Sections					
Surfacing Placed					
Surfacing Finished					
Finished Grading					
Finishing Stakes	30-A				
Rough Grading	50-A				
Slope Stakes	80				
Preliminary Cross Sections					
Center Line Stakes	100 +50				

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project **47.2** Grading **59** Surfacing **0.0** Culverts **100** Bridges **None** Guard Rail _____ Ditch Checks _____

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

[illegible]

Report No. 22

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C.Name of Road West Point-Crowell

BUREAU OF ROADS AND BRIDGES

County Cuming.Paving Contractor Peterson Shirley & Gunther Bridge ContractorWeek Ending 12-9-22Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.STATIONS
1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfing Placed

Surfing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 48.3 Grading 59.2 Surfing 3.2Culverts 100Bridges None

Guard Rail

Ditch Checks

Check Work Not Started by Contractor—Bridges

Pavement

Guard Rail

Tile

Ditch Checks

Surfing

Working Force and Equipment Now in Use

GRADING

CULVERT

Number

No. of
Hours
UsedRate
per
Hour

Number

No. of
Hours
UsedRate
per
Hour

Foreman

1

20

0.30

Laborers

6

120

0.25

Cooks

Head of Stock

12

240

Tractors

Elevating Graders

Blade Graders

Dump Wagons

Trucks

Fresnos

4

80

Slips

2

40

Plows

1

20

Conc. Mixers

Culverts Completed During Week

STATION

SIZE

LENGTH

KIND

Total No. lineal feet culvert pipe
installed to date

342

Total No. cu. yds. box culverts
installed to date

40

Total No. cu. yds. headwalls
installed

27

No. miles of project completed
under Co. maintenance

Engineering Force

NAME

RANK

Alfred L. Ogle Proj. Engr.

E.P. Clements. Rodman.

G.S. Callahan Rodman.

OFFICIAL VISITORS

NAME

DATE

Alfred L. Ogle In Charge
 Address West Point, Nebr. Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 23

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No. 88-C

Name of Road West Point-Wisner

BUREAU OF ROADS AND BRIDGES

County Cuming

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Week Ending 12-16-22

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 55.3 Grading 59.5 Surfacing 24.8 Culverts 100 Bridges None Guard Rail Ditch Checks.

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	20	0.30								Alfred L. Ogle	Proj. Engr.
Laborers	6	120	0.25								E. P. Clements	Rodman
"											G. S. Callahan	Rodman
Cooks												
Head of Stock	12	240										
Tractors												
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date	342				
Dump Wagons							Total No. cu. yds. box culverts installed to date	40				
Trucks							Total No. cu. yds. headwalks installed	27				
Fresnos	4	80					No. miles of project completed under Co. maintenance					
Slips	2	40										
Plows	1	20										
Conc. Mixers												

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Address **West Point, Nebr.** Tel. No. **273**

Report No. 24

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

Project No....88-C

Name of Road West Point-Wisner

BUREAU OF ROADS AND BRIDGES

County Cuming

Paving Grading Contractor Peterson, Shirley & Gunther Bridge Contractor

Week Ending 4-21-23

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

	STATIONS	1" = 100 Stations or 1" = 200 Stations
Accepted by State		
Final Cross Sections		
Surfacing Placed	30-A	
Surfacing Finished		
Finished Grading	50-A 57-A	
Finishing Stakes	57-A	
Rough Grading	60-A	
Slope Stakes	60 83	
Preliminary Cross Sections		
Center Line Stakes	102 +90	

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 65 Grading 50 Surfacing 40 Culverts 100 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	40	0.40								Alfred L.Ogle	Proj.Engr.
Laborers	4	160	0.35								E.P.Clements	Rodman.
"												
Cooks												
Head of Stock	14	560										
Tractors												
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date	342				
Dump Wagons							Total No. cu. yds. box culverts installed to date	40.928				
Trucks							Total No. cu. yds. headwalls installed	24.505				
Fresnos	3	120					No. miles of project completed under Co. maintenance					
Slips												
Plows												
Conc. Mixers												
							NOTE--One copy to Division Engineer and two copies to Lincoln Office.					

Alfred L Ogle In Charge
Address West Point, Nebr Tel. No. 273

Report No. 25

State of Nebraska
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Project No. 88-C.Name of Road West Point-WisnerCounty Cuming.Paving Grading Contractor Peterson, Shirley & Gunther Bridge ContractorWeek Ending 4-28-23Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.

STATIONS
 1" = 100 Stations or
 1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 69 Grading 53 Surfacing 40 Culverts 100 Bridges None Guard Rail Ditch Checks Check Work Not Started by Contractor—Bridges Pavement Guard Rail Tile Ditch Checks Surfacing **Working Force and Equipment Now in Use**

GRADING

CULVERT

	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	40	0.40			
Laborers	4	160	0.35			
"						
Cooks						
Head of Stock	14	560				
Tractors						
Elevating Graders						
Blade Graders						
Dump Wagons						
Trucks						
Fresnos	3	120				
Slips						
Plows	1	40				
Conc. Mixers						

Culverts Completed During Week

STATION

SIZE

LENGTH

KIND

Total No. lineal feet culvert pipe installed to date

342

Total No. cu. yds. box culverts installed to date

40.928

Total No. cu. yds. headwalls installed

24.505

No. miles of project completed under Co. maintenance

Engineering Force

NAME

RANK

Alfred L. Ogle Proj. Engr.

E. P. Clements Rodman.

OFFICIAL VISITORS

NAME

DATE

Alfred L. Ogle In Charge
 Address West Point, Nebr. Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 26

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Project No. 88-C

County Cuming

Week Ending 5-5-23

Name of Road West Point-Wisner

Paving Grading Contractor Peterson, Shirley & Gunther **Bridge Contractor**

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 69 Grading 55 Surfacing 40 Culverts 100 Bridges None Guard Rail _____ Ditch Checks _____

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	2	60	0.40								Alfred L. Ogle	Proj. Engr.
Laborers	6	210	0.35								E. P. Clements	Rodman.
"												
Cooks												
Head of Stock	26	880										
Tractors												
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date	342			M. C. Noble	5-2-23
Dump Wagons											M. F. Black	5-2-23
Trucks							Total No. cu. yds. box culverts installed to date	40.928				
Fresnos	5	170										
Slips							Total No. cu. yds. headwalls installed	24.505				
Plows	2	70									<i>Alfred L. Ogle</i>	In Charge
Conc. Mixers							No. miles of project completed under Co. maintenance				Address	West Point, Nebr. Tel. No. 273
							NOTE--One copy to Division Engineer and two copies to Lincoln Office.					

Report No. 27

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Project No. 88-CName of Road West Point-WisnerCounty CumingPaving Grading Contractor Cuming County

Bridge Contractor

Week Ending 5-12-23Culvert Contractor Western Bridge & Constr. Co. Guard Rail Contractor Western Bridge & Constr. Co.

STATIONS
1" = 100 Stations or
1" = 200 Stations

Accepted by State

Final Cross Sections

Surfacing Placed

Surfacing Finished

Finished Grading

Finishing Stakes

Rough Grading

Slope Stakes

Preliminary Cross Sections

Center Line Stakes

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 69 Grading 55 Surfacing 40 Culverts 100 Bridges None Guard Rail

Ditch Checks

Check Work Not Started by Contractor—Bridges

Pavement

Guard Rail

Tile

Ditch Checks

Surfacing

Working Force and Equipment Now in Use

GRADING

CULVERT

	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour
Foreman	1	40	0.40			
Laborers	4	160	0.35			
"						
Cooks						
Head of Stock	6	240				
Tractors						
Elevating Graders						
Blade Graders						
Dump Wagons						
Trucks						
Fresnos	2	80				
Slips						
Plows						
Conc. Mixers						

Culverts Completed During Week

STATION	SIZE	LENGTH	KIND
Total No. lineal feet culvert pipe installed to date		342	
Total No. cu. yds. box culverts installed to date		40.928	
Total No. cu. yds. headwalls installed		24.505	
No. miles of project completed under Co. maintenance			

Engineering Force

NAME	RANK
Alfred L. Ogle	Proj. Engr.
R. P. Clements	Rodman.

OFFICIAL VISITORS

NAME	DATE

Alfred L. Ogle In Charge
Address West Point, Nebr Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 28

Name of Road West Point-Wisner

Paving Grading Contractor Cuming County

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

State of Nebraska
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Project No. 88-C

County Cuming

Week Ending 5-19-23

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 74 Grading 82 Surfacing 40 Culverts 100 Bridges None Guard Rail _____ Ditch Checks _____

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	2	120	150Mo.									
Laborers	34	2040	0.40									
"	2	120	125Mo.									
Cooks	2	120	100Mo.									
Head of Stock	90	5400										
Tractors												
Elevating Graders	2	120										
Blade Graders	2	60					Total No. lineal feet culvert pipe installed to date	342				
Dump Wagons	14	840					Total No. cu. yds. box culverts installed to date	40.928				
Trucks							Total No. cu. yds. headwalls installed	24.505				
Fresnos	2	40					No. miles of project completed under Co. maintenance					
Slips	1	40										
Plows	1	60										
Conc. Mixers												

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Address West Point, Nebr. Tel. No. 273

Report No. _____ 29 _____

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Project No. 88-C

County Cuming

Week Ending 5-26-23

Name of Road West Point-Wisner

Paving Grading Contractor Cuming County

Bridge Contractor

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 77 Grading 95 Surfacing 40 Culverts 100 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges.

Pavement

Guard Rail

Tile

Ditch Checks

—Surfacing

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	2	120	150Mo.								Alfred L.Ogle	Proj.Engr.
Laborers	6	360	125Mo.								E.P.Clements.	Rodman.
"	26	1560	0.40									
Cooks	2	120	120Mo.									
Head of Stock	97	5340										
Tractors												
Elevating Graders	2	90					Total No. lineal feet culvert pipe installed to date	342			W.F.Hart	5-22-23
Blade Graders	1	60					Total No. cu. yds. box culverts installed to date	40.928				
Dump Wagons	20	1200					Total No. cu. yds. headwalls installed	24.505			<i>Alfred L. Ogle</i>	In Charge
* Trucks							No. miles of project completed under Co. maintenance					
Fresnos												
Slips	1	60										
Plows	1	60										
Conc. Mixers												

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 30

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Project No. 88-C

County Cuming

Name of Road West Point-Crowell

Paving Grading Contractor Cuming County **Bridge Contractor** _____ **Week Ending** 6-2-23

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Brudge & Comstr. Co.

STATIONS											
1" = 100 Stations or											
1" = 200 Stations											
Accepted by State											
Final Cross Sections	29-A										
Surfacing Placed											
Surfacing Finished	33-A										
Finished Grading	57-A 60-A										
Finishing Stakes	West Point										
Rough Grading											
Slope Stakes											
Preliminary Cross Sections											
Center Line Stakes				102 150							

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 85 Grading 95 Surfacing 60 Culverts 100 Bridges None Guard Rail Ditch Checks.

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

[illegible]

Report No. 31

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Project No. 88-C

County Cuming.

Name of Road West Point-Crowell

Paving Contractor Cuming County

Bridge Contractor

Week Ending 6-9-23

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 88 Grading 95 Surfacing 82 Culverts 100 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	2	120	150Mo.								Alfred L.Ogle	Proj.Engr.
Laborers	6	360	125Mo.								L.M.Wedner	Rodman.
"	26	1300	0.40								J.C.Broady	Chainman.
Cooks	2	120	120Mo.									
Head of Stock	97	4850										
Tractors												
Elevating Graders	2	90					Total No. lineal feet culvert pipe installed to date	342				
Blade Graders	1	50					Total No. cu. yds. box culverts installed to date	40.928				
Dump Wagons	18	900					Total No. cu. yds. headwalls installed	24.505				
Trucks							No. miles of project completed under Co. maintenance					
Fresnos												
Slips	1	50										
Plows	1	50										
Conc. Mixers												

OFFICIAL VISITORS

NAME	DATE

Alfred L. Ogle In Charge

Address West Point, Nebr. Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 32

State of Nebraska
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Project No. 88-C

Name of Road West Point-Crowell

County Cuming

Paving Grading Contractor Cuming County

Bridge Contractor

Week Ending 6-16-23

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project	90	Grading	100	Surfacing	79	Culverts	100	Bridges	None	Guard Rail	Ditch Checks
--------------------------------------	----	---------	-----	-----------	----	----------	-----	---------	------	------------	--------------

Check Work Not Started by Contractor—Bridges

Pavement

Guard Rail

Tile

Ditch Checks

Surfacing

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	2	120	150Mo.								Alfred L.Ogle	Proj.Engr.
Laborers	6	360	125Mo.								L.M.Wedner	Rodman.
"	26	1040	0.40								J.C.Broady	Chairm an
Cooks	2	120	120Mo.									
Head of Stock	97	3880										
Tractors												
Elevating Graders	1	40					Total No. lineal feet culvert pipe installed to date		342			
Blade Graders	1	40					Total No. cu. yds. box culverts installed to date		40.928			
Dump Wagons	18	720					Total No. cu. yds. headwalls installed		24.505			
Trucks							No. miles of project completed under Co. maintenance					
Fresnos												
Slips	1	40										
Plows	2	80										
Conc. Mixers												

(Signature) In Charge

Address West Point, Nebr. Tel. No. 273

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 33

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Project No. 88-C,

County_Cuming

Week Ending 6-23-23

Name of Road West Point-Crowell

Paving Grading Contractor Cuming County

Bridge Contractor

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 96 Grading 100 Surfacing 93 Culverts 100 Bridges None Guard Rail Ditch Checks.

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	2	120	150Mo.								Alfred L.Ogle	Proj.Engr.
Laborers	6	360	125Mo.								L.M.Wedner	Rodman.
"	26	1300	0.40								J.C.Broady	Chairman.
Cooks	2	120	120Mo.									
Head of Stock	97	4850										
Tractors												
Elevating Graders	1	50					Total No. lineal feet culvert pipe installed to date	342			M.F.Black	6-22-23
Blade Graders	2	100					Total No. cu. yds. box culverts installed to date	40.928				
Dump Wagons	18	900					Total No. cu. yds. headwalks installed	24.505			<i>Alfred L. Ogle</i>	In Charge
Trucks							No. miles of project completed under Co. maintenance	1.0			Address West Point-Nebr.	Tel. No. 273
Fresnos												
Slips	2	100										
Plows	2	100										
Conc. Mixers												

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Report No. 34

State of Nebraska
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Project No. 88-C

Name of Road West Point-Crowell

County Cuming

Paving Grading Contractor---Cuming County

Bridge Contractor

Week Ending 6-30-23

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 97 Grading 100 Surfacing 96 Culverts 100 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

[illegible]

Report No. 35

State of Nebraska

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Project No. 88-C

County__Cuming

Week Ending 7-7-23

Name of Road West Point-Crowell

Paving Grading Contractor... Cuming County

Bridge Contractor

Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

[illegible]

RED--INDICATES WORK DURING WEEK (SHOW STATIONS)

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project: Grading 100 Surfacing 100 Culverts 100 Bridges None Guard Rail _____ Ditch Checks _____

Check Work Not Started by Contractor—Bridges.

Pavement

Guard Rail

__Tile.

Ditch Checks.

—Surfacing.

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	50	150	Mo.							Alfred L. Ogle	Proj. Engr.
Laborers	6	300	125	Mo.							L. M. Wedner	Rodman.
"											J. C. Broady	Chainman.
Cooks												
Head of Stock	15	750										
Tractors												
Elevating Graders												
Blade Graders												
Dump Wagons	3	150					Total No. lineal feet culvert pipe installed to date		342		M. F. Black	7-2-23
Trucks							Total No. cu. yds. box culverts installed to date		40.928			
Fresnos	2	100					Total No. cu. yds. headwalls installed		24.505			
Slips							No. miles of project completed under Co. maintenance		1.0			
Plows	1	50										
Conc. Mixers												

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

State of Nebraska

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

County Cuming-----

Bridge Contractor

Week Ending 7-14-23

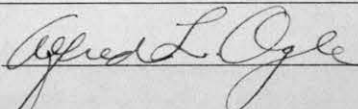
Culvert Contractor Western Bridge & Constr. Co. **Guard Rail Contractor** Western Bridge & Constr. Co.

West Point

BLACK--INDICATES PREVIOUS WORK

Per cent of Work Done—Entire Project 100 Grading 100 Surfacing 100 Culverts 100 Bridges None Guard Rail Ditch Checks

Check Work Not Started by Contractor—Bridges _____ Pavement _____ Guard Rail _____ Tile _____ Ditch Checks _____ Surfacing _____

Working Force and Equipment Now in Use							Culverts Completed During Week				Engineering Force	
	GRADING			CULVERT			STATION	SIZE	LENGTH	KIND	NAME	RANK
	Number	No. of Hours Used	Rate per Hour	Number	No. of Hours Used	Rate per Hour						
Foreman	1	50	150Mo.								Alfred L. Ogle	Proj. Engr.
Laborers	6	300	125Mo.								L.M. Wedner	Rodman.
"											J.C. Broady	Chainman.
Cooks												
Head of Stock	15	750									OFFICIAL VISITORS	
Tractors											NAME	DATE
Elevating Graders												
Blade Graders							Total No. lineal feet culvert pipe installed to date	342				
Dump Wagons	3	150					Total No. cu. yds. box culverts installed to date	40.928				
Trucks							Total No. cu. yds. headwalls installed	24.505				
Fresnos	2	100					No. miles of project completed under Co. maintenance	1.0			 In Charge	
Slips											Address <u>West Point, Nebr.</u> Tel. No. <u>273</u>	
Plows	1	50										
Conc. Mixers												

NOTE--One copy to Division Engineer and two copies to Lincoln Office.

Est. Checked by

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS

MONTHLY ESTIMATE

Grading Contractor Cuming CountyAddress West Point, Nebr.Proj. No. 88-CCounty Cuming

Culvert Contractor

Address

Date May1923 Est. No. 7

TOTAL ESTIMATED QUANTITIES TO DATE	UNIT	ITEMS-GRADING	QUANTITIES PRELIMINARY ESTIMATE	ITEMS NO.	BID PRICE	AMOUNT	NET AMOUNT DUE CONTRACTORS
24,500	Cu.Yds.	Earth Excavation	27482	1	\$0.31	\$ 7595.00	
2,650	" "	Clay Excavation for Surf.	7443	2	0.40	1060.00	
2,406	Cu.Yd.Mi.	Overhaul " "	6576	8	0.40	962.40	
<u>Peterson, Shirley & Gunther</u>							
Earth Exc. 14,700 Cu.Yds.							
Clay " 2,200 " "							
C.Y.M. Over. 1,875							
			Total			\$ 9617.40	
			Less 10% Retained			\$ 8655.66	
			Previous Payments			\$ 5568.30	
			Amount this Estimate			\$ 3087.36	\$ 3087.36
ITEMS-CULVERTS							
<u>Cuming County</u>							
Earth Exc. 9300 Cu.Yds. - Sub Schluter Bros.							
" " 500 " " - Sub Ewing							
Clay " 450 " " " "							
C.Y.M. Overhaul 531 " "							
			Total			\$	
			Less 10% Retained			\$	
			Previous Payments			\$	
			Amount this Estimate			\$	\$
			Grand Total			\$	\$

I hereby certify that the work represented by the above quantities have been computed from measurements, made by me or my predecessors, and that the work has been performed according to plans and specifications.

Agnes L. Ogle
West Point

Engineer in Charge

Address

Estimate Approved by

Division Engineer

Estimate Approved by

Chief Bureau of Roads

Voucher Issued

192

Est. Checked by

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS

MONTHLY ESTIMATE

Grading Contractor Cuming County Address West Point, Nebr. Proj. No. 88-C County Cuming
Culvert Contractor _____ Address _____ Date June 25, 1923 Est. No. B

TOTAL ESTIMATED QUANTITIES TO DATE	UNIT	ITEMS—GRADING	QUANTITIES PRELIMINARY ESTIMATE	ITEMS NO.	BID PRICE	AMOUNT	NET AMOUNT DUE CONTRACTORS
26,000	Cu. Yds.	Earth Excavation	27,482	1	\$0.31	\$8060.00	
7,000	" "	Clay Excavation for Surfacing	7,443	2	0.40	2800.00	
6,500	Cu. Yd. Mi.	Overhaul " "	6,576	8	0.40	2600.00	
<u>Peterson, Shirley & Gunther</u>							
		Earth Exc.	14700	Cu. Yds.			
		Clay Exc.	2200	" "			
		C.Y. M. Overhaul	1875				
			Total			\$13460.00	
			Less 10% Retained			\$12114.00	
			Previous Payments			\$8655.66	
			Amount this Estimate			\$3458.34	\$3458.34
ITEMS—CULVERTS							
<u>Cuming County</u>							
		Earth Exc.	9300	Cu. Yds.	- Sub Schluter Bros.		
		" "	2000	" "	" Ewing		
		Clay	896	" "	" "		
		" "	3909	" "	" Schluter Bros.		
		Cu. Yd. Mi. Overhaul	1711	" "	" Ewing		
		" " " "	2914	" "	" Schluter Bros.		
			Total			\$	
			Less 10% Retained			\$	
			Previous Payments			\$	
			Amount this Estimate			\$	\$
			Grand Total			\$	\$

I hereby certify that the work represented by the above quantities have been computed from measurements, made by me or my predecessors, and that the work has been performed according to plans and specifications.

Agnes L. Ogle
West Point
Engineer in Charge
Address

Estimate Approved by _____ Division Engineer

Estimate Approved by _____ Chief Bureau of Roads

Voucher Issued _____ 192 _____ Est. Checked by _____

DEPARTMENT OF PUBLIC WORKS

BUREAU OF HIGHWAYS

COUNTY CumingNAME OF ROAD West Point-CrowellPROJECT NO. 88 SEC. C

DRAINAGE STRUCTURES

Sept. 25, 1922

STATION	OLD STRUCTURES	NEW STRUCTURE	SPECIAL EXC. Class "A"	PIPE						CU. YDS. CONCRETE BOXES	CU. YDS. CONCRETE HEAD WALLS
				18	24	30	36	48	60		
<u>8+00-A</u>		<u>18"X24' Conc. Pipe</u>		<u>24</u>							
<u>21+25-A</u>		<u>24"X30' Conc. Pipe</u>			<u>30</u>						
<u>37+25-A</u>		<u>30"X56' Conc. Pipe</u>	<u>25</u>			<u>56</u>					<u>3.25</u>
<u>44+00-A</u>		<u>4'X5'X29' Conc. Box</u>	<u>9</u>							<u>22</u>	
<u>49+00-A</u>		<u>24"X52' Conc. Skew Pipe</u>			<u>52</u>						<u>2.93</u>
<u>57+00-A</u>		<u>24"X40' Conc. Pipe</u>	<u>9</u>		<u>40</u>						<u>2.91</u>
<u>43+51</u>		<u>24"X48' Conc. Pipe</u>	<u>48</u>		<u>48</u>						<u>2.91</u>
<u>58+88</u>		<u>30"X24' Conc. Pipe</u>				<u>24</u>					
<u>81+00</u>		<u>18"X40' Conc. Pipe Ditch X-ing.</u>		<u>40</u>							
<u>88+70</u>		<u>18"X24' Conc. Pipe</u>		<u>24</u>							
		<u>Totals</u>	<u>91</u>	<u>88</u>	<u>170</u>	<u>80</u>				<u>22</u>	<u>12.00</u>

State of Nebraska
Department of Public Works
 Bureau of Roads & Bridges

Trade name Sand-Gravel aggregate
 Identification marks Pile #1
 Submitted by Alfred L. Ogle Title Project Engineer Address West Point
 Sampled September 6, 1922 Received September 5, 1922
 Sampled from C. & N.W. car #73821
 Quantity Represented 88200 Lbs.
 Source of Material Lyman-Richey Co. Freemont, Nebraska.
 Location used or to be used on project No. 88-C
 Examine for Box culverts and Bulkheads

It is desired that this material be tested to determine its suitability for use as follows:

Box culverts and Bulkheads

(Note—In order to have proper tests made it is essential that the above statement be as complete as possible.)

Has material been used on roads or structures and with what result?

Date received _____ Condition _____ Serial No. _____

Remarks:

State of Nebraska
Department of Public Works
 Bureau of Roads & Bridges

Laboratory.....88-C-1.....

Sept. 11, 1922

Name.....Sand-Gravel Aggregate.....

Identification marks.....88-C.....

Submitted by Alfred L. Ogle Title Proj. Engineer Address West Point, Nebr.

Sampled.....Sept. 6, 1922.....Received....., 1922.....

Sampled from C. & N.W. Car No. 73821

Quantity Represented.....88200 Lbs.....

Source of Material.....Fremont, Nebraska.....

Location used or to be used on project No.....88-C.....

Examined for Box Culverts and Pipe Headwalls.

TEST RESULTS**SAND****Mechanical Analysis**

FRACTION	Percent
Retain ¼-inch Screen.....	15.5
Passing ¼-inch Screen, retained 10 mesh.....	24.5
Passing 10 mesh, retained 20 mesh.....	20.4
Passing 20 mesh, retained 30 mesh.....	15.0
Passing 30 mesh, retained 40 mesh.....	6.2
Passing 40 mesh, retained 50 mesh.....	8.3
Passing 50 mesh, retained 60 mesh.....	
Passing 60 mesh, retained 80 mesh.....	6.9
Passing 80 mesh, retained 100 mesh.....	1.6
Passing 100 mesh, retained 200 mesh.....	1.4
Passing 200 mesh.....	.3
Total.....	100.1
Silt in sand.....	0.2

Tensile strength.

Cement—sand briquettes 1:3.

Standard Ottawa Sand			Sample Sand		
3 days	7 days	28 days	3 days	7 days	28 days

GRAVEL**Mechanical Analysis**

FRACTION	Percent
Retained 3-inch Screen.....	
Passing 3-inch, retained 2½-inch.....	
Passing 2½-inch, retained 2-inch.....	
Passing 2-inch, retained 1½-inch.....	
Passing 1½-inch, retained 1-inch.....	
Passing 1-inch, retained ¾-inch.....	
Passing ¾-inch, retained ½-inch.....	
Passing ½-inch, retained ¼-inch.....	
Passing ¼-inch screen.....	
Total.....	
Per cent of wear over ¼-inch.	

Character of material
 Satisfactory for Headwalls when mixed
 1-4 Box Culverts-Rejected-Too fine
 Remarks:
 Sp. Gr. -----2.62
 % voids-----25.6
 Wt. cu. ft. -----121.9
 Colormetric -----O.K.
 Fineness Modulus 3.68
 Respectfully submitted by

(Title) Clark. E. Mickey

State of Nebraska

Department of Public Works

Bureau of Roads & Bridges

Trade name Sand-Gravel aggregate
Identification marks File #2
Submitted by Alfred L. Ogle Title Project Engineer Address West Point
Sampled September 13, 1922 Received September 11, 1922, 1922
Sampled from A.T. & S.F. car #74522
Quantity Represented 66100 Lbs.
Source of Material Lyman-Richey Co. Fremont, Nebraska
Location used or to be used on project No 88-C
Examine for Box culverts and Bulkheads

It is desired that this material be tested to determine its suitability for use as follows:

Box culverts and Bulkheads.

(Note—In order to have proper tests made it is essential that the above statement be as complete as possible.)

Has material been used on roads or structures and with what result?

Date received _____ Condition _____ Serial No. _____

Remarks:

State of Nebraska
Department of Public Works
 Bureau of Roads & Bridges

Laboratory 88-C-2

Sept. 16, 1922

Name Sand-Gravel AggregateIdentification marks Pile #2Submitted by Alfred L. Ogle Title Proj. Engineer. Address West Point, Nebr.Sampled 9-13, 1922 Received 9-11, 1922Sampled from Car A.T. & S.F. #74522Quantity Represented 66100 Lbs.Source of Material Fremont, Nebr.Location used or to be used on project No. 88-CExamined for Headwalls and Box Culverts**TEST RESULTS****SAND****Mechanical Analysis**

FRACTION	Percent
Retain ¼-inch Screen	28.2
Passing ¼-inch Screen, retained 10 mesh	28.7
Passing 10 mesh, retained 20 mesh	20.3
Passing 20 mesh, retained 30 mesh	10.2
Passing 30 mesh, retained 40 mesh	3.3
Passing 40 mesh, retained 50 mesh	4.0
Passing 50 mesh, retained 60 mesh	
Passing 60 mesh, retained 80 mesh	3.2
Passing 80 mesh, retained 100 mesh	.7
Passing 100 mesh, retained 200 mesh	.9
Passing 200 mesh	.5
Total	100.0
Silt in sand	0.4

Tensile strength.

Cement—sand briquettes 1:3.

Standard Ottawa Sand			Sample Sand		
3 days	7 days	28 days	3 days	7 days	28 days

GRAVEL**Mechanical Analysis**

FRACTION	Percent
Retained 3-inch Screen	
Passing 3-inch, retained 2½-inch	
Passing 2½-inch, retained 2-inch	
Passing 2-inch, retained 1½-inch	
Passing 1½-inch, retained 1-inch	
Passing 1-inch, retained ¾-inch	
Passing ¾-inch, retained ½-inch	
Passing ½-inch, retained ¼-inch	
Passing ¼-inch screen	
Total	
Per cent of wear over ¼-inch.	

Character of material

For Headwalls Mix 1-4.25

For Culverts Mix 1-4.00

Remarks: Sp. Gr. -----2.62

% voids-----30.2

Wt. Cu. Ft. -----114.3

Colormetric ----- O.K.

Fineness Modulus 4.35

Respectfully submitted by

Clark E. Mickey(Title) Cons. & Testing Engineer

State of Nebraska
Department of Public Works
Bureau of Roads & Bridges

Trade name Atlas Portland Cement Company
Identification marks Bin #1
Submitted by Alfred L. Ogle Title Project Engineer Address West Point
Sampled September 6, 1922 Received September 1, 1922
Sampled from Car #19513 M. P.
Quantity Represented 173 Barrels
Source of Material Hannibal, Missouri
Location used or to be used on project No. 88-C
Examine for Box culverts and Bulkheads

It is desired that this material be tested to determine its suitability for use as follows:

Box culverts and Bulkheads

.....

.....

.....

(Note—In order to have proper tests made it is essential that the above statement be as complete as possible.)

Has material been used on roads or structures and with what result?

.....

.....

.....

.....

.....

Date received..... Condition..... Serial No.....

Remarks:

RECEIVED
SEP 11 1922
STATE OF NEBRASKA

State of Nebraska
Department of Public Works
 Bureau of Roads & Bridges

Report on tests of sample of Portland Cement

Dated at Lincoln, Nebraska Sapt. 16, 1922

Laboratory No. 88-C1

Received 1922, Sampled 9-6- 1922, by 17a or 17b*

Sampled from Car, Initial M.P. No. 19513

Quantity Represented 173 bbls. or _____ sacks

Where stored _____

Brand Atlas

Manufactured at Hannibal, Mo. by Atlas Portland Cement Co.

Used or to be used on project No. 88-C

Examined for Box Culverts & Pipe Headwalls Alfred L. Ogle Proj. Engr.
West Point, Nebraska.

TEST RESULTS

Chemical tests:

Loss on ignition, per cent. _____

Insoluble residue, per cent. _____

Sulphuric anhydride (SO₃), per cent. _____

Magnesia (MgO), per cent. _____

Physical tests:

Specific gravity _____

Retained on 200 mesh sieve, per cent. 21.0

Steam test O.K. or _____

Gilmore needle

Vicat needle

Initial set 3-30 or _____

Final set 7-30 or _____

Tensile Strength

Neat cement

Standard Ottawa

Sand Briquettes 1:3

24 hours

7 days

28 days

340

205

360

210

Total 1080

Total 415

Total _____

Average 360

Average 205

Average _____

Remarks 7-day test satisfactory

Accepted/

Respectfully submitted,

Clark E. Mickey

(Title) Cons. & Test. Engr.

*See "Standard Specifications and Tests for Portland Cement of the American Society for Testing Materials, etc., in force January 1, 1917; Sec. 17 (a) individual sample and 17 (b) composite sample."

State of Nebraska
Department of Public Works
 Bureau of Roads & Bridges

Report on tests of sample of Portland Cement

Dated at Lincoln, Nebraska Oct. 6, 1922Laboratory No. 88-C-1Received 1922, Sampled 9-6 1922, by 17a or 17b*Sampled from Car, Initial M.P. No. 19513Quantity Represented 173 bbls. or _____ sacks

Where stored _____

Brand AtlasManufactured at Hannibal, Mo. by Atlas Portland Cement Co.Used or to be used on project No. 88-CExamined for Box Culverts & Pipe Headwalls Alfred L. Ogle, Proj. Engr.West Point, Nebraska.**TEST RESULTS**

Chemical tests:

Loss on ignition, per cent. _____

Insoluble residue, per cent. _____

Sulphuric anhydride (SO₃), per cent. _____

Magnesia (MgO), per cent. _____

Physical tests:

Specific gravity _____

Retained on 200 mesh sieve, per cent. 21.0Steam test O.K. or _____

Gilmore needle

Vicat needle

Initial set 3-30 or _____Final set 7-30 or _____**Tensile Strength**

Neat cement

24 hours

340360380Total 1080Average 360

Standard Ottawa

7 days

205210200Total 615Average 205

Sand Briquettes 1:3

28 days

310310320Total 940Average 313Remarks Satisfactory at end of 28 daysAccepted

Respectfully submitted,

Clark E. Mickey(Title) Cons. & Test. Engr.

*See "Standard Specifications and Tests for Portland Cement of the American Society for Testing Materials, etc., in force January 1, 1917; Sec. 17 (a) individual sample and 17 (b) composite sample."

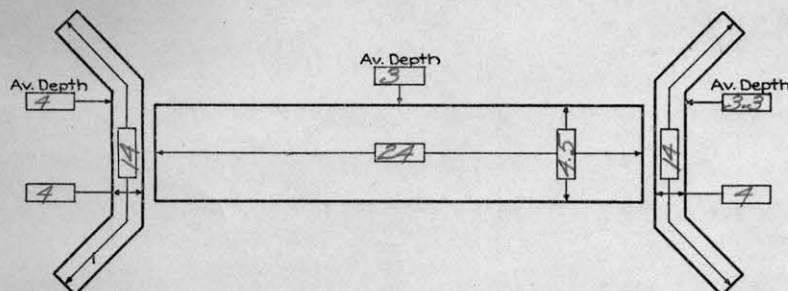
STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Pipe Plan No. 414-B Plan Sta. 8-A Const. Sta. 8-A

EXCAVATION FOR PIPE CULVERT

Figure Here.



$$\begin{aligned}
 14 \times 4 \times 4 &= 224 \\
 14 \times 4 \times 3.3 &= 184.8 \\
 24 \times 4.5 \times 3 &= 324 \\
 \hline
 &732.8 \text{ Cu. Ft.} \\
 &= 27.1 \text{ Cu. Yds.}
 \end{aligned}$$

HEADWALL AND PIPE DIMENSIONS

Length of pipe to outside of walls 28' Diameter 18"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

Standard Post _____ Cu. Ft. _____

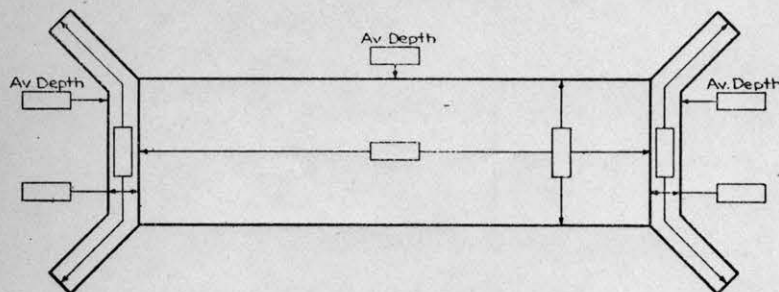
Note—If Headwalls are built Standard, use Plan Quantities. ☒ Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

No posts 2.57 - 0.94 = 2.476Net Cu. Yards 2.476 Cu. Ft. _____

EXCAVATION FOR BOX CULVERTS

Figure Here.



Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. AdamsAddress West PointProject Engr. Alfred L. OgleAddress West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

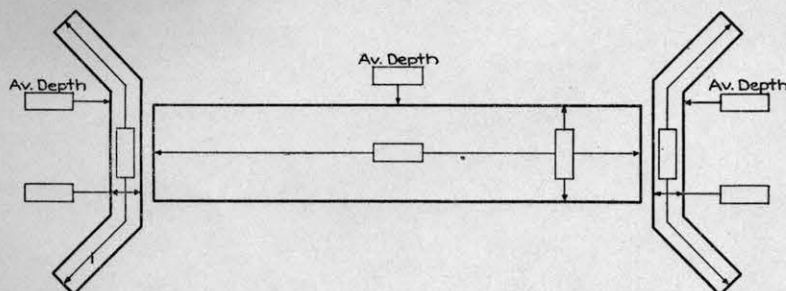
STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Box Plan No. 1800 Plan Sta. 13+55-A Const. Sta. 13+60-A

EXCAVATION FOR PIPE CULVERT

Figure Here.



HEADWALL AND PIPE DIMENSIONS

Length of pipe to outside of walls..... Diameter

Length of Wingwall..... Ave. Height..... Width..... Cu. Ft.....

Length of Endwall..... Height..... Width..... Cu. Ft.....

Standard Post..... Cu. Ft.....

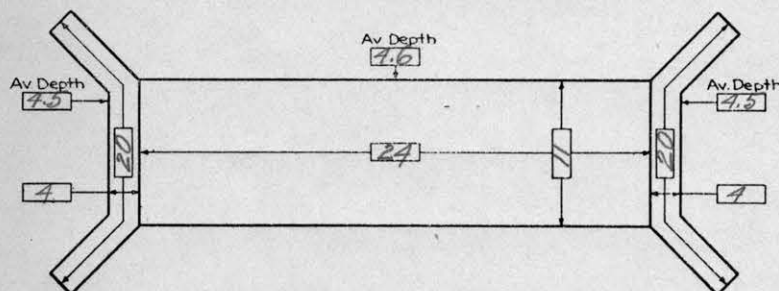
Note—If Headwalls are built Standard, use Plan Quantities. Total Cu. Ft.....

Deduction for Pipe and Openings..... Cu. Ft.....

Net Cu. Yards..... Cu. Ft.....

EXCAVATION FOR BOX CULVERTS

Figure Here.



$$20 \times 4 \times 4.5 \times 2 = 720$$

$$24 \times 11 \times 4.6 = 1214.4$$

$$37.5$$

$$\frac{40}{2011.9 \text{ Cu. Ft.}}$$

$$74.5 \text{ Cu. Yds.}$$

Barrel Footing Length 25' Width 1.5' Depth 1' Cu. Ft. 37.5 Wing Footing Length 20' Width 2' Depth 1' Cu. Ft. 40

BOX CULVERT DIMENSIONS

Span = 6' Box Culvert Rise 3' Length 24'

Slab Length..... Width..... Thickness..... Cu. Ft.....

Floor Length..... Width..... Thickness..... Cu. Ft.....

Walls Length..... Depth..... Thickness..... Cu. Ft.....

Wing Length..... Depth..... Thickness..... Cu. Ft.....

End Wall Length..... Depth..... Thickness..... Cu. Ft.....

Curtain Wall..... Width..... Thickness..... Cu. Ft.....

Wing Footing..... Width..... Depth..... Cu. Ft.....

Barrel Footing..... Width..... Depth..... Cu. Ft.....

Parapet Length..... Depth..... Thickness..... Cu. Ft.....

Note—If box is built Standard, use Plan Quantities. ✓
This space for Remarks and Additional Dimensions.Cu. Yards 18.63 Total Cu. Ft.....Contractor J. A. Adams Address West PointProject Engr. Alfred L. Oyle Address West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

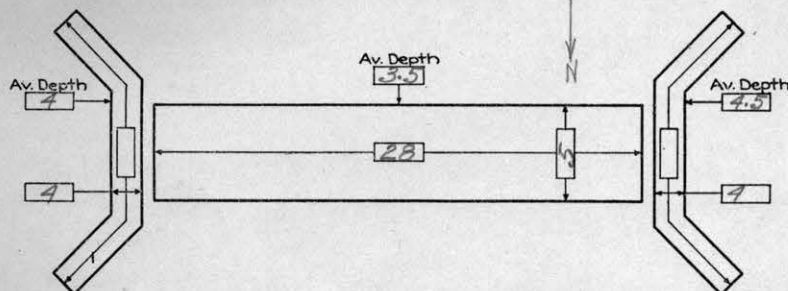
STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Corr. Pipe Plan No. 41A-B Plan Sta. 22-A Const. Sta. 21+25-A

EXCAVATION FOR PIPE CULVERT

Figure Here.



$$\begin{aligned}
 16 \times 4 \times 4 &= 256 \\
 16 \times 4 \times 4.5 &= 288 \\
 28 \times 5 \times 3.5 &= 490 \\
 \hline
 1034 \text{ Cu. Ft.} \\
 &= 38.3 \text{ Cu. Yds.}
 \end{aligned}$$

HEADWALL AND PIPE DIMENSIONS

Length of pipe to outside of walls 24' Diameter 24"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

Standard Post _____ Cu. Ft. _____

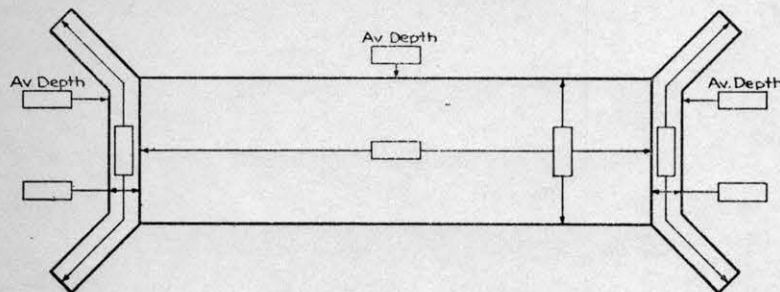
Note—If Headwalls are built Standard, use Plan Quantities. ✓ Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

Net Cu. Yards 2.91 Cu. Ft. _____

EXCAVATION FOR BOX CULVERTS

Figure Here.



Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. AdamsAddress West PointProject Engr. Alfred L. OgleAddress West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.
Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

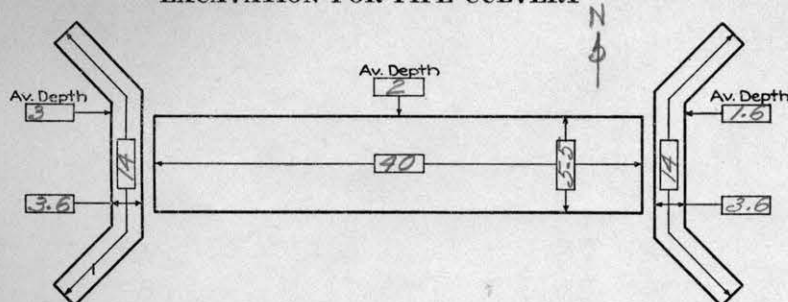
STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Pipe Plan No. 91A-B Plan Sta. 37+25 Const. Sta. 37+25

EXCAVATION FOR PIPE CULVERT

Figure Here.



$$\begin{aligned}
 2 \times 40 \times 5.5 &= 440 \\
 3 \times 3.6 \times 14 &= 151.2 \\
 1.6 \times 3.6 \times 14 &= 80.6 \\
 \hline
 671.8 \text{ Cu. ft.} \\
 &= 24.8 \text{ Cu. Yds.}
 \end{aligned}$$

HEADWALL AND PIPE DIMENSIONS

Length of pipe to outside of walls 56' Diameter 30"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

Standard Post _____ Cu. Ft. _____

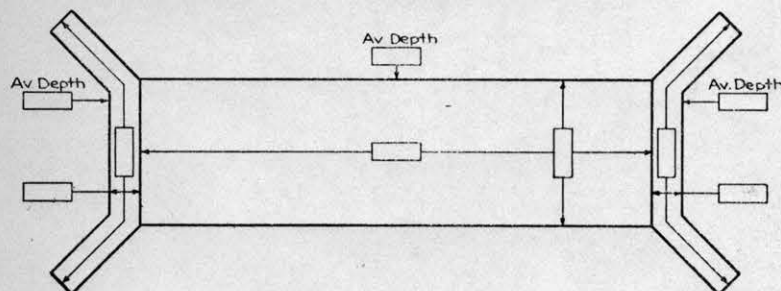
Note—If Headwalls are built Standard, use Plan Quantities. ✓ Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

No posts 3.25 - .094 = 3.156Net Cu. Yards 3.156 Cu. Ft. _____

EXCAVATION FOR BOX CULVERTS

Figure Here.



Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. AdamsAddress West PointProject Engr. Alfred L. OgleAddress West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

Culvert Computation

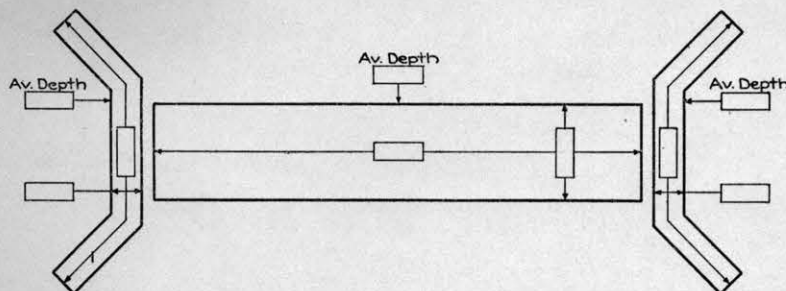
Measured By A.L.O.

Computed By A.L.O.

Name of Road West Point-Crowell Project No. 88-C County Cuming

Type of Culvert Conc. Box Plan No. 1801 Plan Sta. 44-A Const. Sta. 44-A

Figure Here.



Length of pipe to outside of walls.....Diameter.....

Length of Wingwall..... Ave. Height..... Width..... Cu. Ft.....

Length of Endwall..... Height..... Width..... Cu. Ft.....

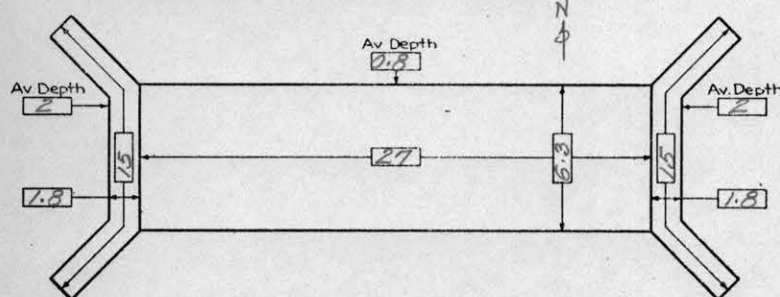
Standard Post Cu. Ft.....

Note—If Headwalls are built Standard, use Plan Quantities. Total Cu. Ft.

Deduction for Pipe and Openings.....Cu. Ft.

Net Cu. Yards..... Cu. Ft.....

Figure Here.



$$\begin{array}{rcl} 27 \times 0.8 \times 6.3 & = & 136.08 \\ 15 \times 1.8 \times 2 & = & 56.88 \\ 15 \times 1.8 \times 2 & = & 56.88 \\ & & 52.5 \\ & & \underline{67.5} \\ & & 369.84 \text{ Cu.ft.} \\ & & = 13.6 \text{ Cu. Yds.} \end{array}$$

Barrel Footing Length 24' Width 1.75' Depth 1.25' Cu Ft. 52.5 Wing Footing Length 24' Width 2.25' Depth 1.25' Cu Ft. 67.5

BOX CULVERT DIMENSIONS

Box Culvert Rise 5' Length 29'

Slab Length 23' Width 5.17' Thickness .58' Cu. Ft. 86.259

Floor Length 30.5' Width 6.33' Thickness .58' Cu. Ft. 111.977

Walls Length 57' Depth 5' Thickness .58' Cnt. Ft. 165,300

Wing Length	24'	Depth	4.69'	Thickness	.83'	Cnt. Ft.	93.425
-------------	-----	-------	-------	-----------	------	----------	--------

End Wall Length	9.4'	Depth	1'	Thickness	1'	Cut. Ft.	9.400
-----------------	------	-------	----	-----------	----	----------	-------

End Wall Length	Depth	Thickness	Cut	Ft
Curtain Wall	20'	Width .75'	Thickness 1'	15.000

Curtain Wall	Width	Thickness	Qty	Unit	Price	Total
Wing Footing	20'	2.25'	1.25'	Cu Ft	67.500	

Wing Footing	Width	Depth	Cu	Et
Borel Footing 24'	1.75'	1.25'		52.500

Barrel Footing	width	Depth	Cu. Ft
Barrel Length	Depth	Thickness	Cu. Ft
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
28	28	28	28
29	29	29	29
30	30	30	30
31	31	31	31
32	32	32	32
33	33	33	33
34	34	34	34
35	35	35	35
36	36	36	36
37	37	37	37
38	38	38	38
39	39	39	39
40	40	40	40
41	41	41	41
42	42	42	42
43	43	43	43
44	44	44	44
45	45	45	45
46	46	46	46
47	47	47	47
48	48	48	48
49	49	49	49
50	50	50	50
51	51	51	51
52	52	52	52
53	53	53	53
54	54	54	54
55	55	55	55
56	56	56	56
57	57	57	57
58	58	58	58
59	59	59	59
60	60	60	60
61	61	61	61
62	62	62	62
63	63	63	63
64	64	64	64
65	65	65	65
66	66	66	66
67	67	67	67
68	68	68	68
69	69	69	69
70	70	70	70
71	71	71	71
72	72	72	72
73	73	73	73
74	74	74	74
75	75	75	75
76	76	76	76
77	77	77	77
78	78	78	78
79	79	79	79
80	80	80	80
81	81	81	81
82	82	82	82
83	83	83	83
84	84	84	84
85	85	85	85
86	86	86	86
87	87	87	87
88	88	88	88
89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

Note—If box is built Standard, use Plan Quantities.

Note—If box is built Standard, use Plan Quantities.
This space for Remarks and Additional Dimensions.

Cu. Yards 22.298 Total Cu. Ft. 602.061 for sketch

Contractor J. G. Adams Address West Point

Project Engr. Alfred A. Ozle Address West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

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STATE OF NEBRASKA

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Culvert Computation

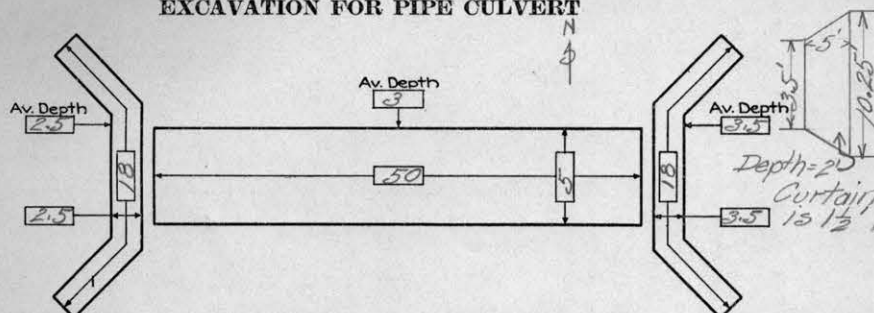
Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Pipe Plan No. 414-B Plan Sta. 42-A Const. Sta. 42-A**EXCAVATION FOR PIPE CULVERT**

Figure Here.

Wings

$$18 \times 2.5 \times 2.5 = 112.5$$

$$18 \times 3.5 \times 3.5 = 220.5$$

Pipe

$$50 \times 5 \times 3 = 750$$

Curtain wall13 1/2 below apronApron

$$10.25 \times 3.5 \times 5 \times 2 = 68.75$$

Curtain Wall

$$10.25 \times 7 \times 1.5 = 10.76$$

$$1163.51 \text{ Cu. Ft.} = 13.05 \text{ Cu. Yds.}$$

HEADWALL AND PIPE DIMENSIONSLength of pipe to outside of walls 52' Diameter 24"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

Standard Post _____ Cu. Ft. _____

Note—If Headwalls are built Standard, use Plan Quantities. Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

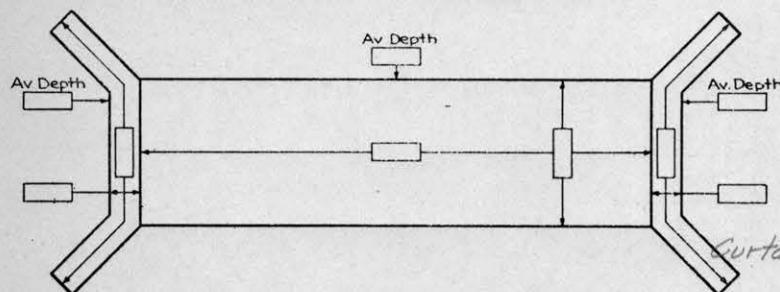
No posts $2.816 + .893 = 3.709$ Net Cu. Yards 3.709 Cu. Ft. _____**EXCAVATION FOR BOX CULVERTS**

Figure Here.

Concrete Apron

$$4.4 \times 12.5 \times 2.6 \times 0.5 = 10.99$$

$$12.5 \times 7 \times 1.5 = 13.13$$

$$24.12 \text{ Cu. Ft.} = 2.893 \text{ Cu. Yds.}$$

Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. AdamsAddress West PointProject Engr. Edward L. OgleAddress West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

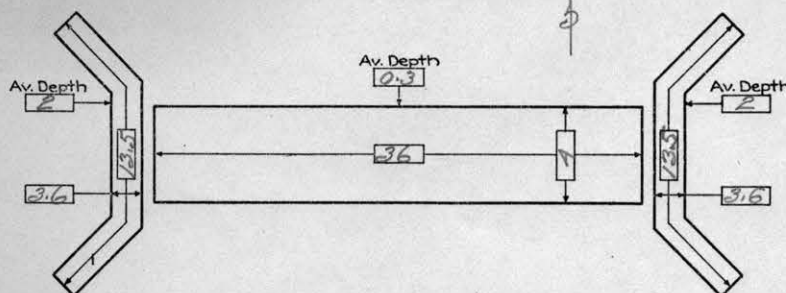
STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Pipe Plan No. 414-B Plan Sta. 57-A Const. Sta. 57-A

EXCAVATION FOR PIPE CULVERT

Figure Here.



$$\begin{aligned}
 0.3 \times 36 \times 4 &= 43.2 \\
 2 \times 3.6 \times 13.5 &= 97.2 \\
 2 \times 3.6 \times 13.5 &= 97.2 \\
 \hline
 &237.6 \text{ Cu. Ft.} \\
 &= 8.8 \text{ Cu. Yds.}
 \end{aligned}$$

HEADWALL AND PIPE DIMENSIONS

Length of pipe to outside of walls 40' Diameter 24"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

Standard Post _____ Cu. Ft. _____

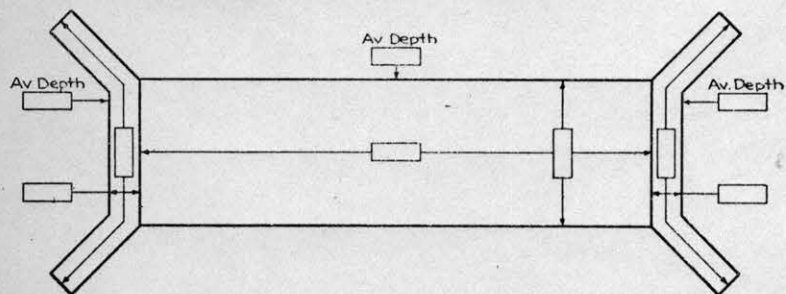
Note—If Headwalls are built Standard, use Plan Quantities. ☒ Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

No posts $2.91 - (0.047)2 = 2.816$ Net Cu. Yards 2.816 Cu. Ft. _____

EXCAVATION FOR BOX CULVERTS

Figure Here.



Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. Adams Address West PointProject Engr. Alfred L. Ogale Address West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

STATE OF NEBRASKA

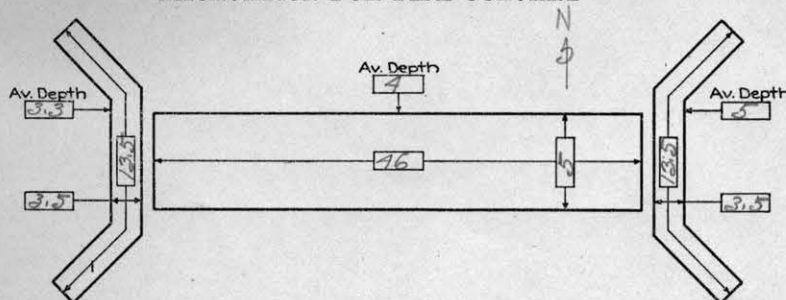
DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Pipe Plan No. 414-B Plan Sta. 44 Const. Sta. 43+51**EXCAVATION FOR PIPE CULVERT**

Figure Here.



$$\begin{aligned}
 3.3 \times 3.5 \times 13.5 &= 155.93 \\
 4 \times 16 \times 5 &= 920. \\
 5 \times 13.5 \times 3.5 &= 236.25 \\
 \hline
 &1312.18 \text{ Cu. Ft.} \\
 &= 48.6 \text{ Cu. Yds.}
 \end{aligned}$$

HEADWALL AND PIPE DIMENSIONSLength of pipe to outside of walls. 48' Diameter 24"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

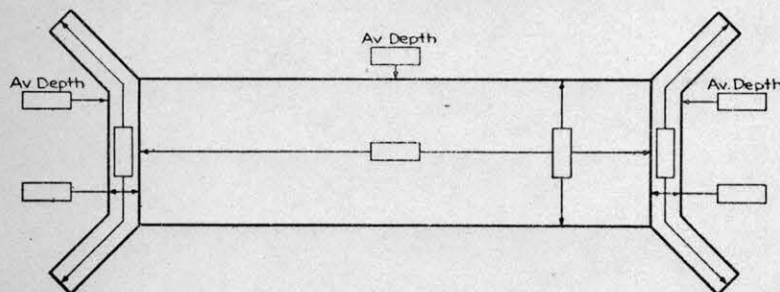
Standard Post _____ Cu. Ft. _____

Note—If Headwalls are built Standard, use Plan Quantities. Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

No posts $2.91 - 0.094 = 2.816$ Net Cu. Yards 2.816 Cu. Ft. _____**EXCAVATION FOR BOX CULVERTS**

Figure Here.



Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. AdamsAddress West PointProject Engr. Agnes L. OgleAddress West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

STATE OF NEBRASKA

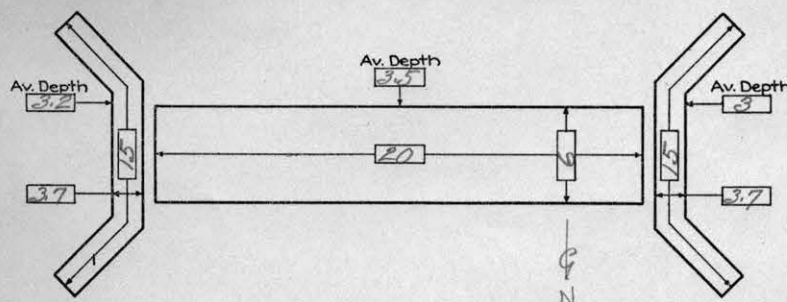
DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Pipe Plan No. 414-B Plan Sta. 58+88 Const. Sta. 58+88**EXCAVATION FOR PIPE CULVERT**

Figure Here.



$$\begin{aligned}
 15 \times 3.7 \times 3.2 &= 177.6 \\
 15 \times 3.7 \times 3 &= 166.5 \\
 20 \times 6 \times 3.5 &= 420 \\
 \hline
 &764.1 \text{ Cu. Ft.} \\
 &28.3 \text{ Cu. Yds.}
 \end{aligned}$$

HEADWALL AND PIPE DIMENSIONS

Length of pipe to outside of walls 24' Diameter 30"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

Standard Post _____ Cu. Ft. _____

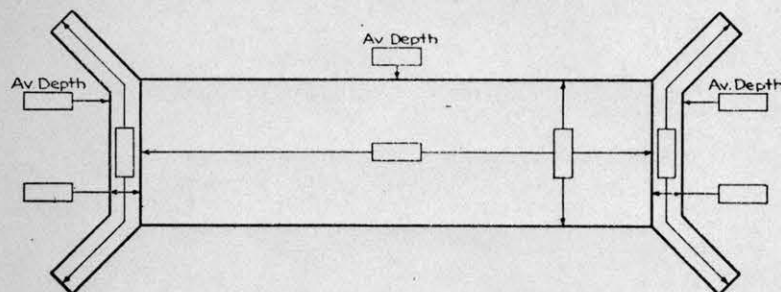
Note—If Headwalls are built Standard, use Plan Quantities. ☒ Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

Net Cu. Yards 3.25 Cu. Ft. _____

EXCAVATION FOR BOX CULVERTS

Figure Here.



Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. AdamsAddress West PointProject Engineer Jeffrey L. OgleAddress West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

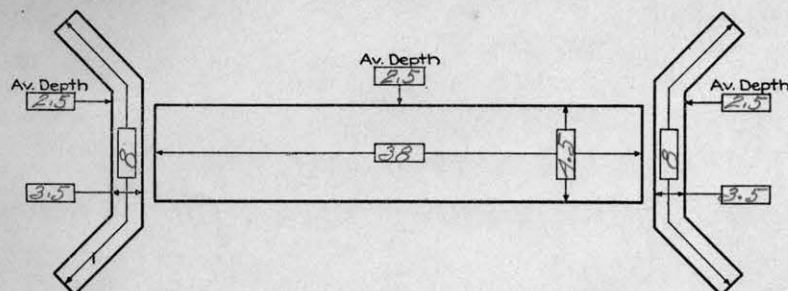
STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Pipe D.C. Plan No. 415-A Plan Sta. 80+27 Const. Sta. 81

EXCAVATION FOR PIPE CULVERT

Figure Here.



$$38 \times 4.5 \times 2.5 = 427.5$$

$$2 \times 8 \times 3.5 \times 2.5 = 140$$

$$567.5 \text{ Cu. Ft.}$$

$$21 \text{ Cu. Yds.}$$

HEADWALL AND PIPE DIMENSIONS

Length of pipe to outside of walls 40' Diameter 18"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

Standard Post _____ Cu. Ft. _____

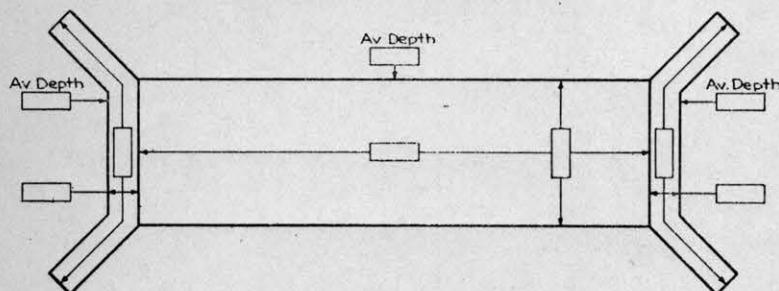
Note—If Headwalls are built Standard, use Plan Quantities. ☒ Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

Net Cu. Yards _____ Cu. Ft. _____

EXCAVATION FOR BOX CULVERTS

Figure Here.



Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. Adams Address West PointProject Engr. Richard L. Ogle Address West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

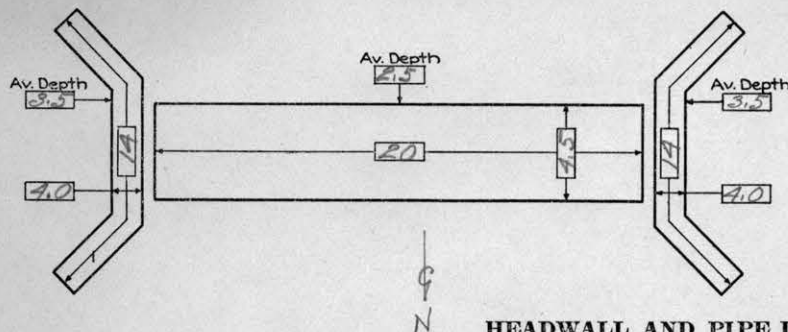
STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

Culvert Computation

Measured By A.L.O.Computed By A.L.O.Name of Road West Point-Crowell Project No. 88-C County CumingType of Culvert Conc. Pipe Plan No. 414-B Plan Sta. 88+71 Const. Sta. 88+70

EXCAVATION FOR PIPE CULVERT

Figure Here.



$$2 \times 14 \times 4 \times 3.5 = 392$$

$$20 \times 4.5 \times 2.5 = 225$$

617 Cu. ft.

22.9 Cu. Yds.

HEADWALL AND PIPE DIMENSIONS

Length of pipe to outside of walls 29' Diameter 18"

Length of Wingwall _____ Ave. Height _____ Width _____ Cu. Ft. _____

Length of Endwall _____ Height _____ Width _____ Cu. Ft. _____

Standard Post _____ Cu. Ft. _____

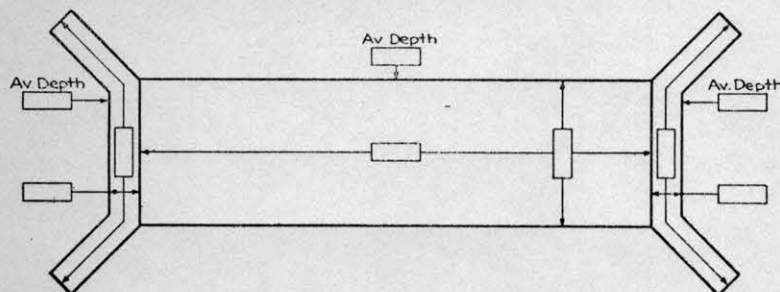
Note—If Headwalls are built Standard, use Plan Quantities. ☒ Total Cu. Ft. _____

Deduction for Pipe and Openings _____ Cu. Ft. _____

Net Cu. Yards 2.57 Cu. Ft. _____

EXCAVATION FOR BOX CULVERTS

Figure Here.



Barrel Footing Length _____ Width _____ Depth _____ Cu. Ft. _____ Wing Footing Length _____ Width _____ Depth _____ Cu. Ft. _____

BOX CULVERT DIMENSIONS

Box Culvert Rise _____ Length _____

Slab Length _____ Width _____ Thickness _____ Cu. Ft. _____

Floor Length _____ Width _____ Thickness _____ Cu. Ft. _____

Walls Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Wing Length _____ Depth _____ Thickness _____ Cu. Ft. _____

End Wall Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Curtain Wall _____ Width _____ Thickness _____ Cu. Ft. _____

Wing Footing _____ Width _____ Depth _____ Cu. Ft. _____

Barrel Footing _____ Width _____ Depth _____ Cu. Ft. _____

Parapet Length _____ Depth _____ Thickness _____ Cu. Ft. _____

Note—If box is built Standard, use Plan Quantities.

This space for Remarks and Additional Dimensions.

Cu. Yards _____ Total Cu. Ft. _____

Contractor J. A. AdamsAddress West PointProject Engr. Alfred L. OgleAddress West Point

To get length of wings and parapet, measure inside and outside and take average for correct length.

Note—Three copies to be made and signed by Contractor or Foreman, and the Engineer in charge. One copy retained, one for Foreman or Contractor, one for Division Engineer. Copies must be in carbon.

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES
APPROVAL OF CHANGE IN PLANS

Federal Aid Project No. 88 Section C County Cuming
Location of Change Station X to Station X Sheet No. 3-7 of Approval Plans

To the Chief of Bureau, Lincoln, Nebraska.

Dear Sir: We hereby request your approval of the following proposed changes in plans:

Change in length, location, and number of culverts as listed on form R-16 attached hereto. The difference between the cost of a 30"x 40' Conc. Pipe and the 48x 5'x 29' Conc. Box at Sta. 44-A is to borne by the County. Also use apron on the lower end of pipe at Sta 49-A

Which are desired for the following reasons: Changes in alignment and grade have made these changes necessary.

These conditions have been seen by or explained to Mr. W.F. Hart, Federal Engineer.

The above change will require approximately the following changes in quantities and estimate:

OVER RUN

74	Lin. Ft.	24" Conc. Pipe	@ \$	3.50	\$ 259.00
56	" "	30" " "	@	5.00	\$ 280.00
9,984	Cu. Yds.	Conc. Boxes	@	23.40	\$ 233.63
3,705	" "	Bulkheads	@	26.00	\$ 96.33
101	" "	Special Excavation Class A	@	0.80	\$ 80.80
Total					\$ 949.76

UNDER RUN

4	Lin. Ft.	18" Conc. Pipe	@ \$	2.40	\$ 9.60
			@		\$
			@		\$
			@		\$
			@		\$
Total					\$ 9.60

Respectfully submitted November 15, 1922

Alfred L. Ogden
Project Engineer

Recommended for Approval 192 Examined and Checked 192

Division Engineer

Office Engineer

Additional Federal Aid will be asked to cover the above change of plans, for which a revised estimate will be later submitted.

Approved 192

Chief of the Bureau of Roads and Bridges

NOTE:— Six copies of this form are to be submitted direct to the Division Engineer, for each proposed change of road, bridge, culvert, etc. Plan or sketch of this change should be submitted with this request. This should be made either on Standard Federal Aid Sheets or on the letter size sheets 8½ x 11 inches.

After approval by the Chief of the Bureau of Roads and Bridges four copies are to be forwarded to the District Engineer, U. S. Bureau of Public Roads.

Remarks:

Approved by District Engineer, U. S. Bureau of Public Roads, under date of 192

Approved by Chief Engineer, U. S. Bureau of Public Roads, under date of 192

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES
APPROVAL OF CHANGE IN PLANS

Federal Aid Project No. 88 Section C County Cumong
Location of Change Station -1 X 00-A to Station 102 X 90 Sheet No. 3-7 of Approval Plans

To the Chief of Bureau, Lincoln, Nebraska.

Dear Sir: We hereby request your approval of the following proposed changes in plans:

Change alignment Sta. -1+00 to Sta. 102+90 making road straight through on section
line throughout. Grade changes throughout project as shown on attached profile.

Which are desired for the following reasons: It is desired to build road on section line throughout
Errors in preliminary survey have also made grade changes necessary.

These conditions have been seen by or explained to Mr. W.F. Hart, Federal Engineer.

The above change will require approximately the following changes in quantities and estimate:

OVER RUN

<u>9482 Cu. Yds. Earth Excavation</u>	<u>@ \$0.31</u>	<u>\$2939.42</u>
	@	\$
	@	\$
	@	\$
	@	\$
	@	\$
		<u>Total \$2939.42</u>

UNDER RUN

	@	\$
	@	\$
	@	\$
	@	\$
	@	\$
	@	\$
		<u>Total \$</u>

Respectfully submitted Nov. 13, 1922

Alfred L. Ogle
Project Engineer

Recommended for Approval 192 Examined and Checked 192

Division Engineer

Office Engineer

Additional Federal Aid will be asked to cover the above change of plans, for which a revised estimate will be later submitted.

Approved 192

Chief of the Bureau of Roads and Bridges

NOTE:— Six copies of this form are to be submitted direct to the Division Engineer, for each proposed change of road, bridge, culvert, etc. Plan or sketch of this change should be submitted with this request. This should be made either on Standard Federal Aid Sheets or on the letter size sheets 8½ x 11 inches.

After approval by the Chief of the Bureau of Roads and Bridges four copies are to be forwarded to the District Engineer, U. S. Bureau of Public Roads.

Remarks: _____

Approved by District Engineer, U. S. Bureau of Public Roads, under date of 192

Approved by Chief Engineer, U. S. Bureau of Public Roads, under date of 192

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES
APPROVAL OF CHANGE IN PLANS

Federal Aid Project No. 88 Section C County Cuming
Location of Change Station -1 X 00-A to Station 46 X 00 Sheet No. 3 of Approval Plans

To the Chief of Bureau, Lincoln, Nebraska.

Dear Sir: We hereby request your approval of the following proposed changes in plans:

Surface project with one foot of clay from station -1+00-A to station 46+00

Which are desired for the following reasons: Since grading present material has been found to be composed entirely of sand and will require a very heavy surfacing to make traffic possible.

These conditions have been seen by or explained to Mr. W.F. Hart, Federal Engineer.

The above change will require approximately the following changes in quantities and estimate:

OVER RUN

3843 Cu. Yds. Excavation of Clay	@ \$0.40	\$1537.20
4876 Cu. Yd. Miles Overhaul	@ 0.40	\$1950.40
	@	\$
	@	\$
	@	\$
	@	\$
	@	\$
	Total	\$3487.60

UNDER RUN

@	\$
@	\$
@	\$
@	\$
@	\$
@	\$
Total	\$

Respectfully submitted Dec. 9, 1922

Alfred L. Ogle
Project Engineer

Recommended for Approval.....192..... Examined and Checked.....192.....

Division Engineer

Office Engineer

Additional Federal Aid will be asked to cover the above change of plans, for which a revised estimate will be later submitted.

Approved.....192.....

Chief of the Bureau of Roads and Bridges

NOTE:— Six copies of this form are to be submitted direct to the Division Engineer, for each proposed change of road, bridge, culvert, etc. Plan or sketch of this change should be submitted with this request. This should be made either on Standard Federal Aid Sheets or on the letter size sheets 8 1/2 x 11 inches.

After approval by the Chief of the Bureau of Roads and Bridges four copies are to be forwarded to the District Engineer, U. S. Bureau of Public Roads.

Remarks:

Approved by District Engineer, U. S. Bureau of Public Roads, under date of.....192.....
Approved by Chief Engineer, U. S. Bureau of Public Roads, under date of.....192.....

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

 COUNTY *Cuming*
 DISTRICT *No. 5*
NAME OF ROAD *West Point - Crowell*PROJECT NO. *88*SEC. NO. *0*

EARTHWORK COMPUTATIONS

PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
-1-A	0	32		0			26-A	100	12	1050	9	750	
0-A	100	88	6000	0			<i>Equation</i>						
+50A	50	170	6450	0			<i>26+18-A =</i>						
1-A	50	226	9900	0			26-A	18	7	171	16	225	
+50A	50	194	10500	0			27-A	100	0	350	71	4350	<i>C=47071</i>
2-A	50	132	8150	0		<i>C=48838</i>	+50A	50	0		121	4800	<i>F=39575</i>
3-A	100	6	6900	54	2700	<i>F=43706</i>	28-A	50	0		162	7075	<i>1.19</i>
4-A	100	0	300	135	9450	<i>1.12</i>	+80A	80	0		182	13760	
5A	100	0	0	122	12850		29-A	20	0		107	2890	
6-A	100	2	100	58	9000		+50A	50	24	600	6	2825	
+40A	40	6	160	48	2120		30-A	50	117	3525	0	150	
+80A	40	3	180	50	1960		+50A	50	200	7925	0		
7-A	20	3	60	40	900		31-A	50	195	9875	0		
+25A	25	2	63	47	1088		+50A	50	210	10125	0		
8-A	75	0	75	50	3638		32-A	50	280	12250	0		
+70A	70	0	0	42	3220		33-A	100	364	32200	0		
9-A	30	1	15	25	1025		34-A	100	556	46000	0		
10-A	100	10	550	7	1600	<i>C=1550</i>	+50A	50	588	28600	0		
11-A	100	1	550	27	1700	<i>F=19318</i>	35-A	50	467	26375	0		
12-A	100	3	200	46	3650	<i>Borrow</i>	+50A	50	210	16925	0		
13-A	100	0	150	62	5400	<i>21632</i>	36-A	50	0	5250	108	2700	<i>C=155350</i>
+35A	35	2	35	45	1873		+50A	50	0		416	13100	<i>F=135413</i>
+55A	20	3	50	42	870		37-A	50	0		555	24275	<i>1.15</i>
+60A	5	0					+25A	25	0		517	13400	
+63A	3	0	0	48	0		+70A	45	0		324	18923	
+80A	17	4	34	39	740		38-A	30	0		267	8865	
14-A	20	1	50	33	720		39-A	100	0		132	19950	
+40A	40	2	60	43	1520		40-A	100	0		106	11900	
15-A	60	1	90	30	2190		41-A	100	0		118	11200	
16-A	100	5	300	11	2050	<i>C=2934</i>	42-A	100	0		104	11100	
17-A	100	12	850	5	800	<i>F=28220</i>	43-A	100	0		121	11250	
18-A	100	5	850	19	1200	<i>Borrow</i>	44-A	100	0		219	17000	
19-A	100	2	350	32	2550	<i>30930</i>	+40A	40	0		250	9380	
20-A	100	0	100	41	3650		45-A	60	0		224	14220	<i>C=69611</i>
21-A	100	0	0	47	4400		+55A	55	34	935	54	7645	<i>F=63491</i>
22-A	100	0	0	50	4850		46-A	45	116	3375	6	1350	<i>1.10</i>
23-A	100	5	250	21	3550		+50A	50	132	6200	0	150	
24-A	100	5	500	14	1750		47-A	50	170	7550	0		
25-A	100	9	700	6	1000		+60A	60	330	15000	0		
COL. TOTAL		54522		93994			COL. TOTAL		234281		233233		

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY CumingDISTRICT No. 5NAME OF ROAD West Point-CrowellPROJECT No. 88 SEC. No. C

EARTHWORK COMPUTATIONS

PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
48-A	40	250	11600	0			43+50	5	0		189	800	
+30-A	30	162	6180	0	0		+60	10	0		112	1505	
+75-A	45	40	1545	52	1170		4	40	0		94	4120	
9-A	25	27	838	27	988		5	100	0	0	61	7950	
+25-A	25	72	1238	0	338		+55	55	8	220	29	2475	
+50-A	25	160	2900	0	0		+65	10	7	75	17	230	C=971
50-A	50	210	9250	0			+90	25	15	275	17	425	F=83660
1-A	100	107	15850	0			6	10	10	125	10	135	Borrow=
2-A	100	46	7650	0			+25	25	3	163	46	700	99421
+50-A	50	52	2450	0	0		7	75	0	113	72	4425	
3-A	50	28	2000	4	100		8	100	0	0	109	9050	
4-A	100	22	2500	11	750		9	100	0		106	10750	
5-A	100	26	2400	14	1250		50	100	0		120	11300	
6-A	100	0	1300	96	5500	C=51018	1	100	0		98	10900	
7-A	100	0	0	220	15800	F=43178	2	100	0		78	8800	
+30-A	30	0	0	172	5880	1.18	3	100	0		73	7550	
8-A	70	1	35	61	8155		+95	95	0		32	4988	
+35-A	35	1	35	68	2258		4	5	0		29	153	
+50-A	15	1	15	78	1095		+20	20	9	90	14	430	C=18875
9-A	50	27	700	11	2225		5	80	130	5560	0	560	F=16631
+30-A	30	105	1980	0	165		+50	50	114	6100	0	0	1.13
60-A	70	190	10325	0	0		6	50	57	4275	0	0	
+207A	20.7	175	3778	0			7	100	0	2850	60	3000	
60+207A =			0				8	100	0	0	70	6500	
3.5+33.8			0				+55	55	0		54	1000	
36	60.2	180	10686	0	0		+85	30	0		26	2795	
7	100	18	9900	6	300		+88	3	0		43	1200	
+55	55	24	1155	8	385		+95	7	0		34	104	
+70	15	7	233	8	120		59	5	0		31	270	
8	30	16	345	20	420	C=26254	60	100	0		22	163	C=29400
9	100	12	1400	12	1600	F=22850	1	100	0		43	2650	F=25607
40	100	13	1250	19	1550	1.14	2	100	0		69	3250	1.15
+40	40	5	360	35	1080		3	100	0	0	61	5600	
+50	10	5	50	36	355		+50	50	7	175	31	6500	
1	50	8	325	48	2100		4	50	50	1425	0	2300	
+50	50	7	375	47	2375		5	100	200	12500	0	775	
2	50	0	175	54	2525		+50	50	213	10325	0	0	
+50	50	0	0	70	3100		6	50	95	475	0	0	+31
3	50	0	0	105	4375		+50	50	7	2550	11	275	
+45	45	0	0	131	2545		7	50	0	175	44	1375	
COL. TOTAL			113823		71269		COL. TOTAL			52446		124803	

DEPARTMENT OF PUBLIC WORKS

COUNTY Cuming

BUREAU OF ROADS AND BRIDGES

DISTRICT No. 5NAME OF ROAD West Point-CrowellPROJECT No. 88 SEC. No. C

EARTHWORK COMPUTATIONS

PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
68	100	0	0	44	5400				0		46		
9	100	57	2850	0	3200	C=12003	90	100	0		55	5050	
+25	25	30	1838	0	0	F=10390	1	100	0		43	4900	C=24750
+60	35	56	2555	0	0	1.15	2	100	1	50	36	3950	F=21040
70	40	22	1560	7	140		3	100	4	250	26	3100	1.17
1	100	0	1100	39	2300		4	100	35	1950	0	1300	
2	100	13	650	12	2550	C=7800	5	100	122	7850	0	0	
3	100	5	900	14	1300	F=6850	6	100	171	14650	0		
4	100	18	1150	0	700	1.15	7	100	186	17850	0		
5	100	215	7650	0	0		+60	60	135	9630	0		
+25	25	237	5650	0			8	40	71	4120	0	0	C=35780
+50	25	211	5600	0			9	100	0	3550	45	2250	F=29855
6	50	100	7775	0	0		100	100	0	0	88	6650	1.19
+50	50	14	2850	6	150		101	100	0		100	9400	
7	50	3	425	19	625	C=30246	102	100	0	0	69	8450	
8	100	0	150	39	2900	F=26576	+90	90	14	620	0	3105	
9	100	0	0	67	5300	1.15							
+40	40	0		76	2860								
80	60	0		79	4650								
+50	50	0		68	3675								
+75	25	0		50	1475								
1	25	0		46	1200								
+50	50	0	0	26	1800								
2	50	4	100	13	975								
+23	23	0	46	71	966	Bridge Begins							
+50		2		37		Bridge Ends							
+75	25	0	25	75	1400								
3	25	0	0	32	2088								
+50	50	0		75	4175								
+65	15	0		62	1028	C=3055							
4	35	0		59	2118	F=23139							
5	100	0		55	5700	BORROW=							
+60	60	0	0	42	2910	24545							
6	40	7	140	16	1160								
+60	60	13	780	3	570								
7	40	13	760	1	80								
8	100	4	1150	23	1200								
9	100	0	200	46	2740								
COL. TOTAL		19904		68045			COL. TOTAL		60530		18155		

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY Cuming

DISTRICT

NAME OF ROAD West Point - CrowellPROJECT No. 88 SEC. No. COverhaul Computations

PRELIMINARY QUANTITIES

BORROW COMPUTATIONS

SUMMARY OF OVERHAUL

Station to	Station	Embankment	Excavation	Formula	Borrow	Station to	Station	Cu. Yds.	Overhauled	Cu. Yd. Sta.
	(Cut (+))	(+)	Alg. Sum	Ver. Ord.			(Cut (+))	Fill (-)	Alg. Sum	Ver. Ord.
-1400A			0	0		32-A	0		0	0
0+00A	6000		+6000	+6000		3-A	32200		+32200	+32200
+50A	6450		+6450	+12450		4-A	46000		+46000	+78200
1+00A	9900		+9900	+22350		+50A	28600		+28600	+106800
+50A	10500		+10500	+32850		5-A	26375		+26375	+133175
2-A	8150		+8150	+41000		+50A	16925		+16925	+150100
3-A	6900	3028	+3872	+44872		6-A	5250	3095	+2155	+152255
4-A	300	10540	-10240	+34632		+50A		15040	-15040	+137215
5-A	0	14376	-14367	+20265		7-A		27820	-27820	+109395
6-A	100	10045	-9945	+10320		+25A		15370	-15370	+94025
+40A	160	2375	-2215	+8105		+70A		21720	-21720	+72305
+80A	180	2195	-2015	+6090		8-A		10160	-10160	+62145
7-A	60	1008	-948	+5142		9-A		22880	-22880	+39265
+25A	63	1220	-1157	+3985		40-A		13655	-13655	+25610
8-A	75	4060	-3985	0		1-A		12860	-12860	+12750
	48838	48838				2-A		12750	-12750	0
							155350	155350		
23-A	0	0		0						
4-A	500	2082	-1582	-1582		42-A	0	0	0	0
5-A	700	1190	-490	-2072		3-A	0	12395	-12395	-12395
6-A	1050	892	+158	-1914		4-A	0	18700	-18700	-31095
+18-26	171	268	-97	-2011		+40A	0	10050	-10050	-41145
7-A	350	5170	-4820	-6831		5-A	0	15680	-15680	-56825
+50A		5695	-5695	-12526		+55A	935	8385	-7450	-64275
8-A		8400	-8400	-20926		6-A	3375	1482	+1893	-62382
+80A		16320	-16320	-37246		+50A	6200	164	+6036	-56346
9-A		3440	-3440	-40686		7-A	7550	0	+7550	-48796
+50A	600	3435	-2835	-43521		+60A	15000	0	+15000	-33796
30-A	3525	179	+3346	-40175		48-A	11600	0	+11600	-22126
+50A	7925		+7925	-32250		+30A	6180	0	+6180	-16016
1-A	9875		+9875	-22375		+75A	4545	1295	+3250	-12766
+50A	10125		+10125	-12250		9-A	838	1090	-252	-13018
2-A	12250		+12250	0		+25A	1238	370	+868	-12150
						+50A	2900		+2900	-9250
	47071	47071				50-A	9250		+9250	0
							69611	69611		

DEPARTMENT OF PUBLIC WORKS BUREAU OF ROADS AND BRIDGES

COUNTY Cuming

DISTRICT

NAME OF ROAD West Point-CrowellPROJECT No. 88 SEC. No. COverhaul Computations

PRELIMINARY QUANTITIES

BORROW COMPUTATIONS

SUMMARY OF OVERHAUL

Station to	Station	Embankment	Excavation	Formula	Borrow	Station to	Station	Cu. Yds.	Overhauled	Cu. Yd. Sta.
	<u>Cut (E)</u>	<u>(E)</u>	<u>Alg. Sum</u>	<u>Var. Ord.</u>			<u>Cut (E)</u>	<u>Fill (E)</u>	<u>Alg. Sum</u>	<u>Var. Ord.</u>
51-A	15850	0	+15850							
2-A	7650	0	+7650							
+50-A	2450	0	+2450							
3-A	2000	118	+1882							
4-A	2500	885	+1615							
5-A	2400	1475	+ 925							
6-A	1300	6500	-5200							
7-A	0	18632	-18632							
+30-A	0	6938	-6938							
8-A	35	9623	-9588							
+35-A	35	2664	-2629							
+50-A	15	1362	-1347							
9-A	700	2626	-1926							
+30-A	1980	195	+1785							
60-A	10325	0	+10325							
+20.7-A	3778	0	+ 3778							
	51018	51018								
Equation: Sta. 60+20.7-A = Sta. 35+39.8										
36	10686	0	+10686	+10686						
7	3900	342	+9558	+20244						
+55	1155	438	+717	+20961						
+70	233	136	+97	+21058						
8	345	499	-134	+20924						
9	1400	1824	-424	+20500						
40	1250	1767	-517	+19983						
+40	360	1231	-871	+19112						
+50	50	405	-355	+18757						
1	325	2494	-2169	+16588						
+50	375	2707	-2332	+14256						
2	175	2878	-2703	+11553						
+50	0	3642	-3642	+7911						
3	0	4987	-4987	+2924						
+45	0	2924	-2924	0						
	26254	26254								

DEPARTMENT OF PUBLIC WORKS BUREAU OF ROADS AND BRIDGES

COUNTY Cuming

DISTRICT

NAME OF ROAD West Point-CrowellPROJECT No. 88 SEC. No. COverhaul Computations

PRELIMINARY QUANTITIES

BORROW COMPUTATIONS

SUMMARY OF OVERHAUL

Station to-	Station	Embankment	Excavation	Formula	Borrow	Station to-	Station	Cu. Yds.	Overhauled	Cu. Yd. Sta.
	OUT (H)	(-)	Alg. sum	Var. Ord.			OUT (H)	FILL (-)	Alg. sum	Var. Ord.
58	0	0	0	0		74	0	0	0	0
+55	0	3210	-3210	-3210		5	7650	0	+7650	+7650
+85	0	1378	-1378	-4588		+25	5650	0	+5650	+13300
+88	0	119	-119	-4707		+50	5600	0	+5600	+18900
+95	0	399	-399	-5106		6	7775	0	+7775	+26675
9	0	187	-187	-5293		+50	2850	172	+2678	+29353
60	0	3030	-3030	-8323		7	425	715	-290	+29063
1	0	3720	-3720	-12043		8	150	3300	-3150	+25913
2	0	6470	-6420	-18463		9	0	6020	-6020	+19893
3	0	7415	-7415	-25878		+40	0	3255	-3255	+16638
+50	175	2640	-2465	-28243		80	0	5300	-5300	+11338
4	1425	882	+543	-27800		+50	0	4189	-4189	+7149
5	12500		+12500	-15300		+75	0	1680	-1680	+5469
+50	10325		+10325	-4975		1	0	1360	-1360	+4109
6	4975		+4975	0		+50	0	2040	-2040	+2069
	29400	29400				2	100	1110	-1010	+1059
						+23	46	1105	-1059	0
							30246	30246		
65+20	0	0	0			96	0	0	0	0
6	475		+475	+475		7	17850		+17850	+17850
+50	2550	372	+2178	+2653		+60	9630		+9630	+27480
7	175	1560	-1385	+1268		8	4120		+4120	+31600
8	0	6230	-6230	-4962		9	2550	2690	+860	+32460
9	2850	3680	-830	-5792		100		7965	-7965	+24495
+25	1838		1838	-3954		1		11210	-11210	+13285
+60	2555		+2555	-1399		2		10200	-10200	+3085
70	1560	161	+1399	0		+90	630	3715	-3085	0
	12003	12003								

PROJECT No. 88 SEC. No. C

PRELIMINARY QUANTITIES

SHEET NO.	COL. NO.	CU. FT. EXCAVATION	CU. FT. EMBANKMENT	SHEET NO.	COL. NO.	CU. FT. EXCAVATION	CU. FT. EMBANKMENT
1	1	54522	93994				
1	2	234281	233233				
2	1	113823	71269				
2	2	52446	124803				
3	1	49904	68045				
3	2	<u>60530</u>	<u>48155</u>				
		565506	639499				

PRELIMINARY QUANTITIES

[illegible][illegible]

DEPARTMENT OF PUBLIC WORKS

COUNTY *Cuming*

BUREAU OF ROADS AND BRIDGES

DISTRICT *No. 5*

NAME OF ROAD West Point-Crowell

PROJECT NO. 88 SEC. NO. C

SUMMARY OF EARTHWORK BY BALANCES

PRELIMINARY QUANTITIES

[illegible]

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

COUNTY *Cuming*
DISTRICT *No. 5*

NAME OF ROAD West Point - Crowell

PROJECT No. 88 SEC. No. C

PRELIMINARY QUANTITIES

[illegible]

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY *Cuming*DISTRICT *5*NAME OF ROAD *West Point - Crowell*PROJECT No. *88* SEC. No. *G*

EARTHWORK COMPUTATIONS

PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
-1-50-A		0		0									
-1-A	50	19	475	5	125		16-A	100	30	4000	24	2550	
0-A	100	59	3900	0	250		17-A	100	39	3450	20	2200	C=31660
0+50-A	50	171	5750	0	00		18-A	100	34	3650	22	2100	F=26790
1-A	50	207	9450	0	00		19-A	100	25	2950	22	2200	1.181
1+50-A	50	153	9000	0	00	C=47630	20-A	100	51	3800	25	2350	
2-A	50	99	6300	0	00	F=42298	21-A	100	23	3700	35	3000	
3-A	100	28	6350	66	3300	1.126	22-A	100	30	2650	42	3850	
4-A	100	8	1800	105	8550		23-A	100	44	3700	24	3300	
5-A	100	6	700	105	10500		24-A	100	43	4350	24	2100	
6-A	100	18	1200	64	8450		25-A	100	40	4150	23	2350	
+40-A	40	14	640	68	2640		26-A	100	47	4350	38	3050	
+80-A	40	16	600	75	2860		Equation Sta. 26+18-A =						
7-A	20	18	340	66	1410		26-A	18	37	756	50	792	
+25-A	25	12	375	46	1400		27-A	100	4	2050	87	6850	C=55856
8-A	75	8	750	29	2813		+50-A	50	0	100	121	5200	F=49317
+70	70	8	560	21	1750		28-A	50	0	00	169	7250	1.132
9-A	30	3	165	23	660		+80-A	80	0	00	223	15680	
10-A	100	24	1350	24	2350		29-A	20	0	00	99	3220	
+12-A	12	17	246	25	294		+50-A	50	23	575	1	2500	
+27-A	15	3	150	38	473		30-A	50	115	3450	0	25	
11-A	73	69	2628	21	2154		+50-A	50	190	7625	0	00	
+50-A	50	85	3850	27	1200		31-A	50	212	10050	0	00	
12-A	50	75	4000	32	1475	C=23692	+50-A	50	222	10850	0	00	
+8-A	8	75	600	32	256	F=19442	32-A	50	280	12550	0	00	
+30-A	22	109	2024	40	792	1.218	33-A	100	387	33350	0	00	
+75-A	45	97	4635	55	2138		34-A	100	567	47700	0	00	
+85-A	10	63	800	59	570		+50-A	50	586	28825	0	00	
13-A	15	55	885	67	945		35-A	50	476	26550	0	00	
+25-A	25	42	1213	68	1688		+50-A	50	231	17675	0	00	C=164875
+35-A	10	18	300	62	650		36-A	50	0	5775	114	2850	F=145973
+55-A	20	5	230	32	940		+50-A	50	0	0	431	13625	1.13
+60-A	5	0	13	23	138		37-A	50	0	0	505	23400	
+63-A	3	0	00	50	110		+25-A	25	0	0	543	13100	
+80-A	17	5	43	51	859		+70-A	45	0	0	400	21218	
14-A	20	32	370	64	1150		38-A	30	0	0	312	10680	
+40-A	40	45	1540	40	2080		39-A	100	0	0	173	24250	
15-A	60	50	2850	27	2010		40-A	100	0	0	410	14150	
							41-A	100	0	0	113	11150	
COL. TOTAL		76082		66980			COL. TOTAL		247631		205290		

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY CumingDISTRICT 5NAME OF ROAD West Point - CrowellPROJECT NO. 88 SEC. NO. C

EARTHWORK COMPUTATIONS

PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
42-A	100	0	00	118			45	85	22	935	27		
43-A	100	0	00	150	134 00		+55	55	20	1155	23	1375	
44-A	100	0	00	228	189 00		+65	10	26	230	3	130	C=8503
+40-A	40	0	00	304	107 40		+90	25	24	625	2	63	F=7069
45-A	60	0	00	274	174 90		46	10	0	120	6	40	1.20
+55-A	55	44	1210	73	95 43		+25	25	26	325	24	375	
46-A	45	106	3375	4	1733	C=84969	47	75	29	2063	25	1838	
+50-A	50	124	5750	3	175	F=75256	48	100	20	2450	17	2100	
47-A	50	155	6975	0	75	1.13	49	100	27	2350	17	1700	
+60-A	60	286	13230	0	0		50	100	15	2100	16	1650	
48-A	40	237	10460	0	0		51	100	22	1850	26	2100	C=15696
+30-A	30	173	6150	0	0		52	100	22	2200	29	2750	F=12800
+75-A	45	31	4590	60	1350		53	100	22	2200	20	2450	1.25
49-A	25	1	400	44	1300		+95	95	25	2233	20	1900	
+25-A	25	52	663	0	550		54	5	20	113	16	90	
+50-A	25	149	2513	0	00		+20	20	15	350	0	160	
50-A	50	214	9075	0	0		55	80	82	2300	0	0	
51-A	100	124	16900	0	0		+50	50	55	3425	0	0	
52-A	100	31	1672	0	0	+47	56	50	31	2150	0	0	C=8995
Omitted from Column total							57	100	2	1650	33	1650	F=7565
Note: ←							58	100	0	100	38	3550	1.19
The excavation shown here was done by							+55	55	0	00	30	1870	
Sub Ewing under the Peterson contract							+85	30	6	90	3	495	
and does not represent the total										33194		27434	
Excavation between these stations, as							96+65		0		0		
this work was later finished under							+80	15	60	450	0	0	
Cuming County contract by Sub							97	20	98	1580	0	0	
Schlueter Bros.							+60	60	99	5850	0	0	
Note: ←							98	40	87	3680	0	0	C=17006
The excavation shown here was done							+35	35	59	2555	0	0	F=9520
under the Peterson Contract by Sub Char							99	65	2	1983	6	195	1.69
Oakley. The work was completed as							+45	45	4	135	2	180	
explained in "note" above.							+55	10	6	50	14	80	
							100	45	5	248	38	1170	
							101	100	0	250	40	3900	
							102	100	0	00	21	3050	
							+90	90	5	225	0	945	
COL. TOTAL		84969		86806			COL. TOTAL		50200		36454		

No over haul

DEPARTMENT OF PUBLIC WORKS

COUNTY Cuming

BUREAU OF ROADS AND BRIDGES

DISTRICT 5NAME OF ROAD West Point-CrowellPROJECT No. 88 SEC. No. CEARTHWORK COMPUTATIONS *Semi Final* PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
52-A	100	31	7750	0	0		46	10	197	1945	5	80	
+50A	50	25	1400	5	125		+25	25	155	4400	23	350	
53-A	50	20	1125	18	575		47	75	102	9638	50	2738	
54-A	100	33	2650	15	1650		48	100	85	9350	103	7650	
55-A	100	36	3450	20	1750		49	100	54	6950	91	9700	
56-A	100	8	2200	95	5750	C=30147	50	100	50	5200	102	9650	
57-A	100	3	550	217	15600	F=45268	51	100	61	5550	77	8950	
+30A	30	1	60	182	5985	B=30300	52	100	75	6800	55	6600	
58-A	70	6	245	61	8505	Rt#3	53	100	50	6250	62	5850	
+35A	35	5	193	64	2188		+95	95	0	2375	28	1275	
+50A	15	4	68	72	1020		54	5	3	8	24	130	
59-A	50	23	625	8	2000		+20	20	8	110	19	430	
+30-A	30	97	1800	0	120		55	80	48	2240	0	760	C=8333
60-A	70	148	8575	0	0		+50	50	44	2300	0	0	F=5845
Equation $57.60 + 20.7 - A = -57.6$							56	50	33	1925	1	25	1.40
354398	20.7	150	3084	0	0		57	100	1	1700	28	1450	
36	60.2	91	7254	0	0		58	100	0	50	33	3050	
37	100	13	5200	8	400		+55	55	0	0	30	1733	
+55	55	18	853	3	303		+85	30	0	0	23	795	
+70	20	6	240	12	150		+88	3	0	0	46	104	
38	30	17	345	18	450		+95	7	0	0	33	277	
39	100	8	1250	20	1900	C=33660	59	5	0	0	36	173	
40	100	20	1400	17	1850	F=25861	60	100	0	0	34	3500	C=32675
+40	40	11	620	25	840	1.30	61	100	0	0	41	3750	F=22057
+50	10	9	100	29	270		62	100	0	0	57	4900	1.48
41	50	20	725	49	1950		63	100	4	200	36	4650	
+50	50	60	2000	49	2450		+50	50	15	475	24	1500	
42	50	77	3425	58	2675		64	50	40	1275	1	625	
+50	50	79	3900	73	3275		65	100	210	12500	0	50	
43	50	66	3625	93	4150		+50	50	195	10125	0	0	
+45	45	55	2723	138	5198		66	50	85	7000	0	0	
+50	5	80	338	189	818		+50	50	6	1275	12	300	+22
+60	10	76	780	114	1515		67	50	0	150	34	1150	
44	40	116	3840	88	4040		68	100	0	0	44	3900	
+15	15	125	1808	77	4238	C=93294	69	100	79	3950	0	2200	
45	85	153	11815	31	4590	F=69247	+25	25	118	2463	0	0	
+55	55	187	9350	6	1018		+60	35	66	3220	0	0	
+65	10	204	1955	1	35		70	40	25	1820	6	120	
+90	25	192	4950	11	150								
COL. TOTAL							COL. TOTAL						

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY CumingDISTRICT 5NAME OF ROAD West Point - CrowellPROJECT No. 88SEC. No. C

EARTHWORK COMPUTATIONS

PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
71	100	0	1250	27	1650	C=18128	95	100	131	8000	0	50	+18
72	100	17	850	4	1550	F=12070	96	100	132	3650	0	0	
73	100	5	1100	10	700	1.51	+65	65	182	12155	0	0	
74	100	36	2050	0	500		+80	15	129	2318	0	0	
75	100	235	13550	0	0		97	20	110	2370	0	0	
+25	25	252	6088	0	0		+60	60	45	4650	0	0	
+50	25	238	6125	0	0		98	40	10	1100	22	440	C=27466
76	50	130	9200	0	0		+35	35	7	238	20	735	F=20826
+50	50	47	4425	0	0		99	65	1	260	37	1853	1.32
77	50	5	1300	6	150		+45	45	1	45	63	2250	
78	100	0	250	58	3200	C=42401	+50	5	1	5	50	283	
79	100	0	0	64	6100	F=28295	100	50	1	50	60	2750	
+40	40	0	0	68	2640	1.46	101	100	0	50	57	5850	
80	60	0	0	83	4530		102	100	1	50	37	4700	
+50	50	1	25	66	3725		+90	90	7	360	5	1830	
+75	25	1	25	72	1725		103+20	30	0	105	0	75	
81	25	9	125	50	1525								
+50	50	14	575	25	1875								
82	50	9	575	10	875								
+23	23	3	138	3	150	Bridge							
+50	27	7	0	2	0								
+75	25	0	88	58	750								
83	25	0	0	82	1750								
+50	50	4	100	58	3500								
+65	15	4	60	56	855								
84	35	6	175	46	1785								
85	100	6	600	47	4650	C=5353							
+60	60	10	480	34	2430	F=21210							
86	40	9	380	13	940	Borrow							
+60	60	24	990	3	480								
87	40	20	880	3	120								
88	100	6	1300	25	1400								
89	100	0	300	46	3550								
90	100	0	0	52	3400	+31							
91	100	1	50	39	4550								
92	100	1	100	41	4000	C=22650							
93	100	5	300	17	2300	F=15800							
94	100	29	1700	1	900	1.44							
COL. TOTAL							COL. TOTAL						

DEPARTMENT OF PUBLIC WORKS

COUNTY *Cumming*

BUREAU OF ROADS AND BRIDGES

DISTRICT 5

NAME OF ROAD West Point - Crowell

PROJECT NO. 88 SEC. NO. C

EARTHWORK COMPUTATIONS *Find* **PRELIMINARY QUANTITIES**

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
Borrow Pit #1													
Second Section													
1+10	0	0		0									
1+35	25	149	1863	22	275								
+40	5	214	908	37	148								
+50	10	265	2395	12	245	C=41294							
+75	25	356	7763	10	275	F=1569							
2+00	25	358	8925	17	338	C-F=							
+25	25	346	8800	3	250	32725=							
+50	25	212	6975	0	38	147/Cu.Yds.							
+75	25	58	3375	0	0								
+85	10	0	230	0	0								
Borrow Pit #2													
Included in Semi-final earthwork computation Sheet #1													
Not used for surfacing													
Borrow Pit #3													
0+00	00	0											
1	100	14	700										
2	100	30	2200										
3	100	49	3950			C=30300							
4	100	72	6050										
5	100	62	6700										
6	100	36	4900										
7	100	40	3800										
8	100	0	2000										
COL. TOTAL													
COL. TOTAL													

EARTHWORK COMPUTATIONS ^{Find} PRELIMINARY QUANTITIES

EARTHWORK SUMMARY													
STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
Borrow Pit #4 (Clay for Surfacing)													
42+50		0											
43	50	26	650										
+45	45	204	5175										
+50	5	181	963										
+60	10	212	1965										
44	40	166	7560										
45	100	283	22450										
+55	55	323	16665										
+65	10	323	3230			C=218656							
+90	25	327	8125			F=0							
46	10	328	3275			=8098 Cu. Yds.							
+25	25	350	8475										
47	75	269	23213										
48	100	157	21300										
49	100	171	16400										
50	100	170	17050										
51	100	223	19650										
52	100	181	20200										
53	100	136	15850										
+95	95	0	6460										
Borrow Pit #5													
0+00													
+50	50	0	0	0									
1	50	53	1325			C=25889							
2	100	169	11100			F=0							
+35	35	166	5863										
3	65	49	6988										
+25	25	0	613										
COL. TOTAL							COL. TOTAL						

Note:

Borrow Pit #4 was used to surface project between the following stations:

48+4 - 46+30

53+50 - 103+20

Note:

Borrow Pit #5 was not used as surfacing, but as borrow only between Stas. 82+50 and 89+31

COUNTY *Cuming*

DISTRICT 5

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

NAME OF ROAD West Point-Crowell PROJECT NO. 88 SEC. NO. C

EARTHWORK COMPUTATIONS *Final* **PRELIMINARY QUANTITIES**

[illegible]

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY CumingDISTRICT 5NAME OF ROAD West Point-CrowellPROJECT No. 88 SEC. No. C

EARTHWORK COMPUTATIONS

PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
Finals - Clay Surfacing - Peterson Contract													
-1+00A		0		0									
0+00A	100	0		12	600								
0+50A	50	0		13	625								
1+00-A	50	0		15	700								
1+50-A	50	0		13	700								
2-A	50	0		14	675								
3-A	100	0		8	1100								
4-A	100	0		10	900								
5-A	100	0		20	1500								
6-A	100	0		20	2000								
6+40A	40	0		18	760								
6+80A	40	0		18	720								
7-A	20	0		18	360								
7+25A	25	0		21	488								
8-A	75	0		15	1350	C=0							
8+70A	70	0		27	1470	F=1886 Cu Yds.							
9-A	30	0		27	810								
10-A	100	0		18	2300								
11-A	100	0		25	2200								
12-A	100	0		24	2450								
13-A	100	0		21	2250								
13+60A	60	0		11	960								
14-A	40	0		22	660								
15-A	100	0		19	2050								
16-A	100	0		16	1750								
17-A	100	0		18	1700								
18-A	100	0		26	2200								
19-A	100	0		22	2400								
20-A	100	0		19	2050								
21-A	100	0		12	1550								
22-A	100	0		13	1250								
23-A	100	0		21	1700								
24-A	100	0		16	1850								
25-A	100	0		18	1700								
26A	100	0		19	1850								
Equation Sta. 26+18-A = Sta. 26-A													
27-A	118	0		13	1888								
28-A	100	0		15	1400								
COL. TOTAL					50916		COL. TOTAL						

COUNTY CumingDISTRICT 5

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

NAME OF ROAD West Point-Crowell PROJECT No. 88 SEC. No. CEARTHWORK COMPUTATIONS *Final* PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
29-A	100			26	2050		40	100			13	1300	
30-A	100			24	2500		41	100			18	1550	
31-A	100			21	2250		+50	50			21	975	
32-A	100			18	1950		42	50			26	1175	
33-A	100			30	2400		+50	50			18	1100	
34-A	100			22	2600		43	50			27	1125	
35-A	100			22	2200		+45	45			14	923	
36-A	100			17	1950		+50	5			21	88	
37-A	100			23	2000		+60	10			28	245	
38-A	100			18	2050		44	40			17	900	
39-A	100			23	2050		45	100			14	1550	
40-A	100			17	2000		+55	55			3	468	
41-A	100			21	1900		+65	10			4	35	
42-A	100			21	2100		+90	25			4	100	
43-A	100			20	2050		46	10			4	40	
44-A	100			28	2400		+25	25			5	113	
45-A	100			16	2200		+30	5			0	13	
46-A	100			24	2000							11700	
47-A	100			18	2100								
48-A	100			24	2100								
49-A	100			25	2450								
50-A	100			20	2250								
51-A	100			22	2100								
52-A	100			18	2000	42850 = 1587 Cu. Yds.	53+50				0		
53-A	100			20	1900		54	50			23	575	
54-A	100			12	1600		55	100			35	2900	
55-A	100			17	1450		56	100			37	3600	
56-A	100			24	2050		57	100			32	3450	
57-A	100			22	2300		58	100			35	3350	
58-A	100			20	2100		59	100			26	3050	
59-A	100			21	2050		60	100			26	2600	
60-A	100			9	1500		61	100			26	2600	
Equation Sta. 60+20.7 = Sta. 35+39.8							62	100			27	2650	
	20.7			15	248		63	100			27	2700	
36	60.2			22	1114	25398 = 889 Cu. Yds.	64	100			25	2600	
37	100			17	1950		65	100			24	2450	
38	100			20	1850		66	100			27	2550	
39	100			13	1650		67	100			22	2450	
												37525	
COL. TOTAL				73412				COL. TOTAL				49225	

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY Cuming
DISTRICT 5NAME OF ROAD West Point-Crowell PROJECT No. 88 SEC. No. CEARTHWORK COMPUTATIONS ^{Final} PRELIMINARY QUANTITIES

STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW	STA.	DIST.	EXCAVATION		EMBANKMENT		BALANCE BORROW
		AREA	CUBIC FEET	AREA	CUBIC FEET				AREA	CUBIC FEET	AREA	CUBIC FEET	
68	100			24	2300								
69	100			24	2400								
70	100			26	2500								
71	100			32	2900								
72	100			31	3150								
73	100			34	3250								
74	100			26	3000								
75	100			25	2550								
76	100			22	2350								
77	100			26	2400								
78	100			25	2550								
79	100			23	2400								
80	100			23	2300								
81	100			26	2450								
82	100			25	2550								
+23	23	Bridge		10	403								
+50	27	Bridge		13	Bridge								
83	50			19	800								
84	100			30	2450								
85	100			25	2750								
86	100			24	2450								
87	100			26	2500								
88	100			25	2550								
89	100			16	2050								
90	100			17	1650								
91	100			28	2250								
92	100			18	2300								
93	100			22	2000								
94	100			17	1950								
95	100			14	1550								
96	100			13	1650								
97	100			21	2000								
98	100			17	1900								
99	100			13	1800								
100	100			14	1650								
101	100			12	1650								
102	100			16	1750								
+90	90			13	1305								
103+20	30			0	125								
COL. TOTAL					80603		COL. TOTAL						

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

COUNTY *Cuming*

DISTRICT 5

NAME OF ROAD West Point-Crowell

PROJECT No. 88 SEC. No. C

Peterson Contract

Overhaul Computations

Final

~~PRELIMINARY~~ QUANTITIES

BORROW COMPUTATIONS					SUMMARY OF OVERHAUL					
Station to	Station	Embankment	Excavation	Formula	Borrow	Station to	Station	Cu. Yds.	Overhauled	Cu. Yds. Sta.
	Cut (+)	(-)	Alg. Sum	Vert. Ord.			Cut (+)	Fill (-)	Alg. Sum	Vert. Ord.
-1-50A	0	0	0	0		14-A	370	1359	-989	-989
-1-A	175	141	+334	+334		+40A	1540	2458	-918	-1907
0-A	3900	282	+3618	+3952		15-A	2850	2376	+474	-1433
+50A	5750	00	+5750	+9702		16-A	4000	3014	+986	-147
1-A	9450		+9450	+19152		17-A	3450	2599	+851	+504
+50A	9000		+9000	+28152		18-A	3650	2482	+168	+1572
2-A	6300		+6300	+34452		19-A	2950	2600	+350	+1922
3-A	6350	3716	+2634	+37086		20-A	3300	2777	+523	+2445
4-A	1800	9627	-7827	+29259		21-A	3200	3545	-345	+2100
5-A	700	11824	-11124	+18135		22-A	2650	4550	-1900	+200
6-A	1200	9516	-8316	+9819		23-A	3700	3900	-200	0
+40A	610	2973	-2333	+7486						
+80A	600	3220	-2620	+1866						
7-A	340	1588	-1248	+3618						
+25A	375	1576	-1201	+2417		24-A	4350	2719	+1631	+1631
8-A	750	3167	-2417	0		25-A	4150	2662	+1488	+3129
						26-A	4350	3456	+894	+4013
						Equation 26+18-A=26+00-A				
8-A	0	0	0	0		26-A	756	899	-143	+3870
+70A	560	2133	-1573	-1573		27-A	2050	7759	-5709	-1839
9-A	165	804	-639	-2212		+50A	100	5890	-5790	-7629
10-A	1350	2863	-1513	-3725		28-A	0	8212	-8212	-15841
+12A	246	358	-112	-3837		+80A	0	17752	-17752	-33593
+27A	150	576	-426	-4263		29-A	0	3648	-3648	-37241
11-A	2628	2625	+3	-4260		+50A	575	2831	-2256	-39497
+50A	3850	1463	+2387	-1873		30-A	3450	28	+3422	-36075
12-A	4000	1798	+2202	+329		+50A	7625		+7625	-28450
+08A	600	312	+288	+617		31-A	10050		+10050	-18400
+30A	2024	965	+1059	+1676		+50A	10850		+10850	-7550
+75A	4635	2605	+2030	+3706		31+80A	7550		+7550	0
+85A	800	694	+106	+3812						
13-A	885	1152	-267	+3545						
+25A	1213	2057	-844	+2701						
+35A	300	792	-492	+2209						
+55A	230	1146	-916	+1293						
+60A	13	168	-155	+1138						
+62A	0	134	-134	+1004						
+80A	43	1047	-1004	0						

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY CumingDISTRICT 5NAME OF ROAD West Point-Crowell PROJECT No. 88 SEC. No. C
Overhaul Computations Final PRELIMINARY QUANTITIES

BORROW COMPUTATIONS

SUMMARY OF OVERHAUL

Station to	Station	Embankment	Excavation	Formula	Borrow	Station to	Station	On Yds.	Overhauled	On Yds. Sta.
	(Cut ft.)		Alt. Sum	Var. Ord.			(Cut ft.)	Fill ft.)	Alt. Sum	Var. Ord.
35+39.8	0									
36	7254		+7254	+7254		58	0			
37	5200	521	+4679	+11933		+55	0	2565	-2565	-2565
+55	853	335	+458	+12321		+85	0	1177	-1177	-3742
+70	240	125	+45	+12436		+88	0	154	-154	-3826
38	345	586	-241	+12125		+95	0	410	-410	-4306
39	1250	2464	-1214	+10981		59	0	256	-256	-4562
40	1400	2406	-1006	+9975		60	0	5180	-5180	-2742
+40	620	1092	-472	+9503		61	0	5560	-5560	-15302
+50	100	350	-250	+9253		62	0	7262	-7262	-22564
41	725	2535	-1810	+7443		63	200	6892	-6692	-20256
+50	2000	3121	-1191	+6252		+50	475	2220	-1745	-31001
42	3425	3480	-55	+6197		64	1375	325	+450	-30551
+50	3200	4265	-365	+5832		65	12500	74	+12426	-18125
43	3625	5410	-1785	+4047		+50	10125	00	+10125	-8000
+45	2723	6770	-1047	0		66	7000	00	+7000	-1000
	33660	33660				+22	1000	00	+1000	0
							22675	22675		
43+45	0									
+50	338	1104				66				
+60	780	2045	-766	-766		+50	1275	453	+822	+822
44	3840	5454	-1265	-2031		67	150	1726	-1576	-754
+15	1808	1671	-1614	-3645		68	00	5864	-5864	-6618
45	11815	6126	+137	-3508		69	3250	3302	+648	-5970
+55	9250	1374	+5613	+2111		+25	2463	0	+2463	-3507
+65	1955	47	+7976	+10087		+60	3220	0	+3220	-287
+90	4250	203	+1308	+11925		70	1820	181	+1639	+1352
46	1945	108	+4774	+16742		71	1250	2476	-1226	+126
+25	4400	473	+1837	+18579		72	850	2325	-1475	-1349
47	2638	3696	+3927	+22506		73	1100	1047	+53	-1296
48	2350	10278	+5942	+28448		74	2050	754	+1296	0
49	6250	13045	-928	+27520			18128	18128		
50	5200	12978	-6095	+21425						
51	5550	12043	-7798	+13647						
52	6800	8910	-6423	+7154						
53	6250	7897	-2110	+5044						
+95	2375	5772	-1647	+3127						
	23224	33224	-3397	0						

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

COUNTY *Cuming*

DISTRICT 5

NAME OF ROAD West Point - Crowell

PROJECT NO. 28 SEC. NO. C

Overhaul Computations

Final

~~PRELIMINARY~~ QUANTITIES

[illegible]

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

COUNTY *Cuming*

DISTRICT 5

NAME OF ROAD West Point-Crowell

PROJECT No. 88 SEC. No. C

Overhaul Computations

Final

~~PRELIMINARY~~ QUANTITIES

[illegible]

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS

COUNTY *Cuming*

DISTRICT 5

BUREAU OF ROADS AND BRIDGES

NAME OF ROAD West Point - Crowell

PROJECT NO. 00 SEC. NO. 6

OVERHAUL COMPUTATIONS (MOMENT METHOD) *Final* PRELIMINARY QUANTITIES

[illegible]

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKSCOUNTY Cuming

BUREAU OF ROADS AND BRIDGES

DISTRICT 5NAME OF ROAD West Point - CrowellPROJECT NO. 88 SEC. NO. COVERHAUL COMPUTATIONS (MOMENT METHOD) Final PRELIMINARY QUANTITIES

STATION	Section Length	Moment Arm Stas.	EXCAVATION		EMBANKMENT		
			Cubic Feet	Summation of Moments	Cubic Feet	Summation of Moments	
-1+00-A							<i>Surfacing</i>
0+00-A	100	0.50			600	300.000	<i>[From Clay Pit No. 1]</i>
0+50-A	50	1.25			625	781.250	<i>Peterson Contract</i>
1+00-A	50	1.75			700	1225.000	
1+50-A	50	2.25			700	1575.000	Distance to C. G. Stations
2+00-A	50	2.75			675	1856.250	Distance to C. G. Stations
3+00-A	100	3.50			1100	3850.000	Total Haul Stations
4+00-A	100	4.50			900	4050.000	Free Haul Stations
5+00-A	100	5.50			1500	8250.000	Overhaul Stations
6+00-A	100	6.50			2000	13000.000	Excavation Cu. Yds.
6+40-A	40	7.20			760	5472.000	OVERHAUL Cu. Yd. Stas.
6+80-A	40	7.60			720	5472.000	
7+00-A	20	7.90			360	2844.000	
7+25-A	25	8.125			488	3965.000	
8+00-A	75	8.625			1350	11643.750	
8+70-A	70	9.350			1470	13744.500	
9+00-A	30	9.850			810	7978.500	
10+00-A	100	10.50			2300	24150.000	
11+00-A	100	11.5			2200	25300.000	
12+00-A	100	12.5			2450	30625.000	
13+00-A	100	13.5			2250	30375.000	Distance to C. G. Stations
13+60-A	60	14.3			960	13728.000	Distance to C. G. Stations
14+00-A	40	14.8			660	9768.000	Total Haul Stations
15+00-A	100	15.5			2050	31775.000	Free Haul Stations
16+00-A	100	16.5			1750	28875.000	Overhaul Stations
17+00-A	100	17.5			1700	29750.000	Excavation Cu. Yds.
18+00-A	100	18.5			2200	40700.000	OVERHAUL Cu. Yd. Stas.
19+00-A	100	19.5			2400	46800.000	
20+00-A	100	20.5			2050	42025.000	
21+00-A	100	21.5			1550	33325.000	
22+00-A	100	22.5			1250	28125.000	
23+00-A	100	23.5			1700	39350.000	
24+00-A	100	24.5			1850	45325.000	
25+00-A	100	25.5			1700	43350.000	
26+00-A	100	26.5			1850	49025.000	
Equation $26+18-A = 26+00-A$							Distance to C. G. Stations
27+00-A	118	27.59			1888	52089.920	Distance to C. G. Stations
28+00-A	100	28.68			1400	40152.000	Total Haul Stations
						15.146	Free Haul Stations
							Overhaul Stations
							Excavation Cu. Yds.
							OVERHAUL Cu. Yd. Stas.

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY CumingDISTRICT 5NAME OF ROAD West Point-CrowellPROJECT NO. 88 SEC. NO. COVERHAUL COMPUTATIONS (MOMENT METHOD) Final PRELIMINARY QUANTITIES

STATION	Section Length	Moment Arm <i>Stas.</i>	EXCAVATION		EMBANKMENT		
			Cubic Feet	Summation of Moments	Cubic Feet	Summation of Moments	
1+10							<u>Borrow Pit #1</u> <u>Section #2</u> <u>Cuming County Contract</u> <u>Placed from Sta. 28-A</u> <u>to Sta. 48-A</u> Distance to C. G. Stations Distance to C. G. Stations Total Haul Stations Free Haul Stations Overhaul Stations Excavation Cu. Yds. OVERHAUL Cu. Yd. Stas.
1+35	25	.125	1588	198.500			
+40	5	.275	760	209.300			
+50	10	.350	2150	752.500			
+75	25	.525	7488	3931.200			
2+00	25	.775	8587	6654.925			
+25	25	1.025	8550	8763.750			
+50	25	1.275	6937	8844.675			
+75	25	1.525	3375	5146.875			
+85	10	1.700	290	493.000			
			33725	34994.425			Distance to C. G. Stations Distance to C. G. Stations Total Haul Stations Free Haul Stations Overhaul Stations Excavation Cu. Yds. OVERHAUL Cu. Yd. Stas.
				.8809			
							Distance to C. G. <u>Pit</u> <u>.8809</u> Stations <u>Haul</u> <u>65.2800</u> Stations Distance to C. G. <u>Fill</u> <u>9.8571</u> Stations Total Haul <u>75.0180</u> Stations Free Haul <u>5.0000</u> Stations Overhaul <u>71.0180</u> Stations Excavation <u>14.71</u> Cu. Yds. OVERHAUL <u>10.4167.478</u> Cu. Yd. Stas. <u>1978.55 Cu. Yd. Mi.</u>

Sta. 2+85

1+10

0+40

Clay Pit

.8809 110'

3500'

X 2918'

X 9.8571'

-1+00-A

-28+00-A

-48+00-A

4 Proj. 88-C

C.G.

C.G.

DEPARTMENT OF PUBLIC WORKS

COUNTY *Cuming*

BUREAU OF ROADS AND BRIDGES

DISTRICT 5

NAME OF ROAD West Point-Crowell

PROJECT NO. 000 SEC. NO. C

OVERHAUL COMPUTATIONS (MOMENT METHOD) *Final* PRELIMINARY QUANTITIES

[illegible]

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY CumingDISTRICT 5NAME OF ROAD West Point-CrowellPROJECT NO. 88 SEC. NO. COVERHAUL COMPUTATIONS (MOMENT METHOD) Final PRELIMINARY QUANTITIES

STATION	Section Length	Moment Arm <u>Stas.</u>	EXCAVATION		EMBANKMENT		<u>Surfacing from Clay Pit #4</u>
			Cubic Feet	Summation of Moments	Cubic Feet	Summation of Moments	
48-A							<u>Cuming County Contract</u>
49-A	100	500			2450	1225.000	<u>Sta. 48-A To 46+30</u>
50-A	100	1.500			2250	3375.000	
51-A	100	2.500			2100	5250.000	
52-A	100	3.500			2000	7000.000	Distance to C. G. Stations
53-A	100	4.500			1900	8550.000	Distance to C. G. Stations
54-A	100	5.500			1600	8800.000	Total Haul Stations
55-A	100	6.500			1450	9425.000	Free Haul Stations
56-A	100	7.500			2050	15375.000	Overhaul Stations
57-A	100	8.500			2300	19550.000	Excavation Cu. Yds.
58-A	100	9.500			2100	19950.000	OVERHAUL Cu. Yd. Stas.
59-A	100	10.500			2050	21525.000	
60-A	100	11.500			1500	17250.000	
<u>Equation Sta. 60+20.7-A = Sta. 35+39.8</u>							
	20.7	12.1035			248	3001.668	
36	60.2	12.508			1114	13933.912	
37	100	13.506			1950	26356.200	
38	100	14.516			1850	26854.600	
39	100	15.516			1650	25601.400	
40	100	16.516			1300	21470.800	
41	100	17.516			1550	27149.800	Distance to C. G. Stations
+50	50	18.266			975	17809.350	Distance to C. G. Stations
42	50	18.766			1175	22050.050	Total Haul Stations
+50	50	19.266			1100	21192.600	Free Haul Station
43	50	19.766			1125	22236.750	Overhaul Stations
+45	45	20.241			923	18682.443	Excavation Cu. Yds.
+50	5	20.491			88	1803.208	OVERHAUL Cu. Yd. Stas.
+60	10	20.566			245	5039.670	
44	40	20.816			900	18734.400	
45	100	21.516			1550	33349.800	
+55	55	22.291			468	10432.188	
+65	10	22.616			35	791.560	
+90	25	22.791			100	2279.100	
46	10	22.966			40	918.640	
+25	25	23.141			113	2614.933	
+30	5	23.291			13	302.783	Distance to C. G. Stations
					12262	459872.855	Distance to C. G. Stations
						10.882	Total Haul Stations
							Free Haul Stations
							Overhaul Stations
							Excavation Cu. Yds.
							OVERHAUL Cu. Yd. Stas.

DEPARTMENT OF PUBLIC WORKS

COUNTY Cuming

BUREAU OF ROADS AND BRIDGES

DISTRICT 5NAME OF ROAD West Point - Crowell PROJECT NO. 88 SEC. NO. COVERHAUL COMPUTATIONS (MOMENT METHOD) Final PRELIMINARY QUANTITIES

STATION	Section Length	Moment Arm <u>Stas.</u>	EXCAVATION		EMBANKMENT		<u>Surfacing from Clay Pit #1</u>
			Cubic Feet	Summation of Moments	Cubic Feet	Summation of Moments	
<u>53+50</u>							<u>Cuming County Contract</u>
<u>54</u>	<u>50</u>	<u>.250</u>			<u>575</u>	<u>143.75</u>	<u>Sta. 53+50 To 103+20</u>
<u>55</u>	<u>100</u>	<u>1.000</u>			<u>2900</u>	<u>2900.00</u>	
<u>56</u>	<u>100</u>	<u>2.</u>			<u>3600</u>	<u>7200.00</u>	
<u>57</u>	<u>100</u>	<u>3.</u>			<u>3450</u>	<u>10350.00</u>	Distance to C. G. Stations
<u>58</u>	<u>100</u>	<u>4.</u>			<u>3350</u>	<u>13400.00</u>	Distance to C. G. Stations
<u>59</u>	<u>100</u>	<u>5.</u>			<u>3050</u>	<u>15250.00</u>	Total Haul Stations
<u>60</u>	<u>100</u>	<u>6.</u>			<u>2600</u>	<u>15600.00</u>	Free Haul Stations
<u>61</u>	<u>100</u>	<u>7.</u>			<u>2600</u>	<u>18200.00</u>	Overhaul Stations
<u>62</u>	<u>100</u>	<u>8.</u>			<u>2650</u>	<u>21200.00</u>	Excavation Cu. Yds.
<u>63</u>	<u>100</u>	<u>9.</u>			<u>2700</u>	<u>24300.00</u>	OVERHAUL Cu. Yd. Stas.
<u>64</u>	<u>100</u>	<u>10.</u>			<u>2600</u>	<u>26000.00</u>	
<u>65</u>	<u>100</u>	<u>11.</u>			<u>2450</u>	<u>26950.00</u>	
<u>66</u>	<u>100</u>	<u>12.</u>			<u>2550</u>	<u>30600.00</u>	
<u>67</u>	<u>100</u>	<u>13.</u>			<u>2450</u>	<u>31850.00</u>	
<u>68</u>	<u>100</u>	<u>14.</u>			<u>2300</u>	<u>32200.00</u>	
<u>69</u>	<u>100</u>	<u>15.</u>			<u>2400</u>	<u>36000.00</u>	
<u>70</u>	<u>100</u>	<u>16.</u>			<u>2500</u>	<u>40000.00</u>	
<u>71</u>	<u>100</u>	<u>17.</u>			<u>2900</u>	<u>49300.00</u>	
<u>72</u>	<u>100</u>	<u>18.</u>			<u>3150</u>	<u>56700.00</u>	
<u>73</u>	<u>100</u>	<u>19.</u>			<u>3250</u>	<u>61750.00</u>	Distance to C. G. Stations
<u>74</u>	<u>100</u>	<u>20.</u>			<u>3000</u>	<u>60000.00</u>	Distance to C. G. Stations
<u>75</u>	<u>100</u>	<u>21.</u>			<u>2550</u>	<u>53550.00</u>	Total Haul Stations
<u>76</u>	<u>100</u>	<u>22.</u>			<u>2350</u>	<u>51700.00</u>	Free Haul Station
<u>77</u>	<u>100</u>	<u>23.</u>			<u>2400</u>	<u>55200.00</u>	Overhaul Stations
<u>78</u>	<u>100</u>	<u>24.</u>			<u>2550</u>	<u>61200.00</u>	Excavation Cu. Yds.
<u>79</u>	<u>100</u>	<u>25.</u>			<u>2400</u>	<u>60000.00</u>	OVERHAUL Cu. Yd. Stas.
<u>80</u>	<u>100</u>	<u>26.</u>			<u>2300</u>	<u>59800.00</u>	
<u>81</u>	<u>100</u>	<u>27.</u>			<u>2450</u>	<u>66150.00</u>	
<u>82</u>	<u>100</u>	<u>28.</u>			<u>2550</u>	<u>71400.00</u>	
<u>+23</u>	<u>23</u>	<u>28.615</u>	<u>Bridge</u>		<u>403</u>	<u>11531.00</u>	
<u>+50</u>	<u>27</u>	<u>28.865</u>	<u>Bridge</u>				
<u>83</u>	<u>50</u>	<u>29.250</u>			<u>800</u>	<u>23400.00</u>	
<u>84</u>	<u>100</u>	<u>30.000</u>			<u>2450</u>	<u>73500.00</u>	
<u>85</u>	<u>100</u>	<u>31.</u>			<u>2750</u>	<u>85250.00</u>	
<u>86</u>	<u>100</u>	<u>32.</u>			<u>2450</u>	<u>78400.00</u>	Distance to C. G. Stations
<u>87</u>	<u>100</u>	<u>33.</u>			<u>2500</u>	<u>82500.00</u>	Distance to C. G. Stations
<u>88</u>	<u>100</u>	<u>34.</u>			<u>2550</u>	<u>86700.00</u>	Total Haul Stations
<u>89</u>	<u>100</u>	<u>35.</u>			<u>2050</u>	<u>71750.00</u>	Free Haul Stations
<u>90</u>	<u>100</u>	<u>36.</u>			<u>1650</u>	<u>59400.00</u>	Overhaul Stations
<u>91</u>	<u>100</u>	<u>37.</u>			<u>2250</u>	<u>83250.00</u>	Excavation Cu. Yds.
<u>92</u>	<u>100</u>	<u>38.</u>			<u>2300</u>	<u>87400.00</u>	OVERHAUL Cu. Yd. Stas.
<u>93</u>	<u>100</u>	<u>39.</u>			<u>2000</u>	<u>78000.00</u>	
<u>94</u>	<u>100</u>	<u>40.</u>			<u>1950</u>	<u>78000.00</u>	
<u>95</u>	<u>100</u>	<u>41.</u>			<u>1550</u>	<u>63550.00</u>	
<u>96</u>	<u>100</u>	<u>42.</u>			<u>1650</u>	<u>69300.00</u>	
<u>97</u>	<u>100</u>	<u>43.</u>			<u>2000</u>	<u>86000.00</u>	

DEPARTMENT OF PUBLIC WORKS

COUNTY *Cuming*

BUREAU OF ROADS AND BRIDGES

DISTRICT 5

NAME OF ROAD West Point - Crowell PROJECT NO. 88 SEC. NO. C

OVERHAUL COMPUTATIONS (MOMENT METHOD) *Final* ~~PRELIMINARY~~ QUANTITIES

[illegible]

DEPARTMENT OF PUBLIC WORKS

COUNTY *Cuming*
DISTRICT *5*

BUREAU OF ROADS AND BRIDGES

NAME OF ROAD West Point-Crowell

PROJECT NO. 88 SEC. NO. C

OVERHAUL COMPUTATIONS (MOMENT METHOD) *Final* ~~PRELIMINARY~~ QUANTITIES

[illegible]

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ROADS AND BRIDGES

COUNTY CumingDISTRICT 5NAME OF ROAD West Point-CrowellPROJECT NO. 88 SEC. NO. CSUMMARY OF EARTHWORK BY BALANCES Final PRELIMINARY QUANTITIES

STATION TO	STATION	EXCAVATION		EMBANKMENT		BALANCES
		CUBIC FEET	CUBIC YARDS	CUBIC FEET	CUBIC YARDS	
Note: The excavation from Sta. -1-50-A to Sta. 51+47-A was completed under the Peterson Contract and is shown below						
-1-50-A	8-A	47630	1764	42298	1567	1.126
8-A	13+80-A	23692	878	13442	720	1.218
13+80-A	23-A	31660	1173	26790	992	1.181
23-A	31+80-A	55856	2069	49317	1827	1.132
31+80-A	42-A	164875	6106	145973	5406	1.13
42-A	51+47-A	84969	3147	75256	2787	1.13
		408682	15137	359076	13299	
Note: The work from Sta. 44+15 To Sta. 58+85 was only partially completed under the Peterson Contract and is shown below as done by Sub J.D. Ewing.						
44+15	48	8503	315	7069	262	1.20
48	54+67	15696	581	12800	474	1.25
54+20	58+85	8995	333	7565	280	1.19
		33194	1229	27434	1016	
Note: The work done from Sta. 96+65 To Sta. 102+20 was only partially completed under the Peterson Contract and is shown below as done by Sub Chas. Oakley						
96+65	102+20	17006	630	9520	353	1.79

COL. TOTAL

PROJECT NO. 88 SEC. NO. C

~~PRELIMINARY~~ QUANTITIES

[illegible]

Station to	Station	Length	Width	TYPE	MATERIAL TO BE HANDLED				
					Av. Depth	Cu. Yards	Available	Sta. Haul	Cu. Yd. Mile
-1+00A	28-A	2918		Clay Surfacing		1818		⁻⁵⁰⁰ 45.837	1580.3
Equation Sta. 26+18-A = Sta. 26+00-A Peterson Contract - Sub Ewing									
28-A	18-A	2000		Clay Surfacing		1471		71.0180	1978.6
Cumming County Contract - Sub Ewing									
18-A	16+30	23109		Clay Surfacing		2134		7.455	301.3
Equation Sta. 60+20.7 = Sta. 35+39.8 Cumming County Contract - Sub Schluter Bros.									
53+50	102+30	491.3		Clay Surfacing		5964		23.081	2607.1
Cumming County Contract - Sub Schluter Bros.									
						11387			6467.3

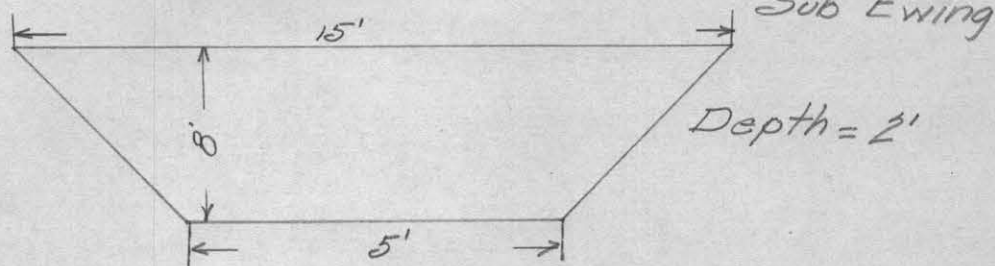
STATE BOARD OF IRRIGATION, HIGHWAY AND DRAINAGE.

COUNTY Cuming

HIGHWAY DEPARTMENT.

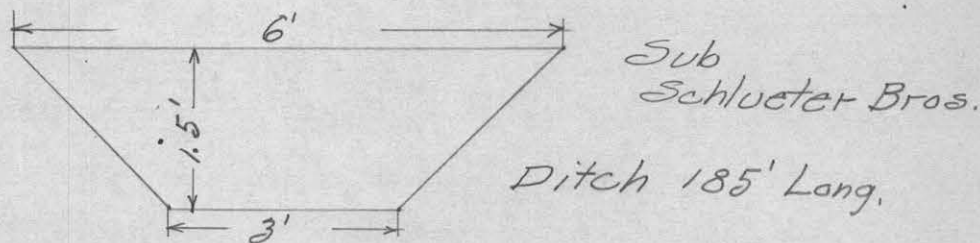
DISTRICT 5NAME OF ROAD West Point-CrowellPROJECT NO. 88 SEC. NO. C~~Final~~ PRELIMINARY ESTIMATE. ~~Final~~ PRELIMINARY QUANTITIES.CLASS "B" EXCAVATION

Culvert at Sta. 37+25

Cuming Co. Contract

$$\frac{15+5}{2} \times 8 \times 2 = 160 \text{ Cu. ft.} = \underline{\underline{6 \text{ Cu. Yds.}}}$$

Outlet Ditch



$$\frac{6+3}{2} \times 1.5 \times 185 = 1248.75 \text{ Cu. ft.}$$

$$= \underline{\underline{16 \text{ Cu. Yds.}}}$$

STATE BOARD OF IRRIGATION, HIGHWAY AND DRAINAGE.

COUNTY Cuming

HIGHWAY DEPARTMENT.

DISTRICT

NAME OF ROAD West Point-Crowell

PROJECT NO. 88 SEC. NO. _____

FINAL PRELIMINARY ESTIMATE. FINAL PRELIMINARY QUANTITIES.

Final Estimate

Proj. 88-C

SUBDIVISION TO CONTRACTORS.

August 13, 1923.

PETERSON CONTRACT

Sub J.D.Ewing.

Sub Chas. Oakley

Ordinary Excavation	16366 Cu. Yds.	630 Cu. Yds.
Overhaul (Earth)	7583 Cu. Yd. Sta.	
Clay Excavation	1818 Cu. Yds.	
Overhaul (Clay)	1580.3 Cu. Yd. Mi.	

CUMING COUNTY CONTRACT

Sub J.D.Ewing.

Sub Schlueter Bros.

Ordinary Excavation	1117 Cu. Yds.	10516 Cu. Yds.
Borrow Excavation	1122 Cu. Yds. (Pit #3)	959 Cu. Yds. (Pit #5)
Waste Excavation	57 " "	
Overhaul (Earth)		19199 Cu. Yd. Sta.
Overhaul (Clay)	1978.6 Cu. Yd. Mi.	2908.4 Cu. Yd. Mi.
Class "B" Excavation	6 Cu. Yds.	46 Cu. Yds.
Clay Excavation	1471 Cu. Yds.	8098 Cu. Yds.

COPY OF REVISED DETAIL ESTIMATE UPON WHICH
MODIFIED PROJECT AGREEMENT IS TO BE BASED

for
NEBRASKA PROJECT NO. 88-C

<u>Approximate Quantities</u>				<u>Unit Price</u>	<u>Amount</u>
27482	Cu.Yd.	Earth Excavation		\$ 0.31	\$8519.42
7443	"	Clay	for Surfacing	0.40	2977.20
351	"	Special	Class A - Culvert	0.80	280.80
200	"	"	Class B - Culvert	0.80	160.00
100	"	"	Class B - Grading	0.80	80.00
10000	"	Station - Overhaul		0.02	200.00
6576	"	Mile - Hauling Clay for Surfacing		0.40	2630.40
30.7	"	Reinf. Conc. 1-2-4 Mix - Box Culvert		23.40	718.38
24.5	"	" " " " - Headwalls		26.00	637.00
92	Lin.Ft.	Concrete Pipe - 18"		2.40	220.80
170	"	" " " - 24"		3.50	595.00
80	"	" " " - 30"		5.00	400.00
152	"	Wood Guard Rail		0.60	91.20
10	Each	Concrete Ditch Checks		14.25	142.50
				Sub-total	\$ 17652.70
				- 10% Engr. & Contg.	1765.27
				Total	\$ 19417.97

Length in miles 2.444
Av. cost per mile \$7945.16

Amount of F. A. requested \$9708.98
" " " recommended \$9708.98

Copied by O.E.H.
Checked by W.F.H.

These unit prices not approved
for force account conditions.

O.K. - R.O.B.
6/13/23.

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES

FINAL ESTIMATE

Name of Road West Point-Crowell Project No. 88-C County Cuming
Contractor Western Bridge & Construction Address Omaha, Nebraska Date Dec. 11, 1922

ORIGINAL QUANTITIES	UNITS	ITEMS	Overruns	Underruns	Item No.	Bid Price	AMOUNT
92	Lin. Ft.	18" Concrete Pipe			36	\$2.40	\$220.80
170	" "	24" " "		6	37	3.50	595.00
80	" "	30" " "			38	5.00	400.00
24.5	Cu. Yds.	Concrete Headwalls	.005		30	26.00	637.00
30.7	" "	Concrete Boxes	10.288		31	23.40	718.38
351	" "	Special Excavation Class "A"		.05	28	0.80	280.80
200	" "	" " " "B"		200	29	0.80	160.00

TOTAL AMOUNT \$3011.98

OVERRUNS			Bid Price	AMOUNT
.005	Cu. Yds.	Concrete Headwalls	\$26.00	\$0.13
10.288	" "	" Boxes	23.40	239.34

UNDERRUNS			Bid Price	AMOUNT	
6	Lin Ft.	24" Concrete Pipe	\$3.50	\$21.00	\$239.47
.05	Cu. Yds	Special Excavation Class "A"	0.80	0104	
200	" "	" " " "B"	0.80	160.00	

CONTINGENCIES Bid Price AMOUNT \$181.04

Note: County to pay the difference in cost between a 30"x 40' Conc. Pipe Culvert and the 4'x 5'x 29' Concrete Box at Sta. 44-A Box Culv.
 40' of 30" Conc. Pipe @ \$5.00 = \$200.00 22.298x 23.40 = \$521.77
 Headwalls 3.156 x 26.00 = 82.06 \$521.77 - \$282.06 = 239.71 to be paid by Co.
 Total = \$282.06

I hereby certify that the work represented by the above Quantities has been computed from measurements made by me or my predecessors, and that the work has been performed according to plans and specifications.

Approved by _____ Title _____
 In Charge
 Approved by _____ Title _____
 Address _____

Total.....\$3070.41
 Previous Payments.....1903.86
 1166.55
 Due from State 926.84
 Due from Co. 239.71
 Amount Due.....

Note: Original quantities based on revised est.

DEPARTMENT OF PUBLIC WORKS

BUREAU OF HIGHWAYS

COUNTY CumingNAME OF ROAD West Point - CrowellPROJECT NO. 88 SEC. C

DRAINAGE STRUCTURES

Final

STATION	OLD STRUCTURES	NEW STRUCTURE	SPECIAL EXC. <u>Class A</u>	PIPE						CU. YDS. CONCRETE BOXES	CU. YDS. CONCRETE HEAD WALLS
				18	24	30	36	48	60		
6+80-A	18" Corr. Pipe Remove										
8-A		18" x 28' Conc. Pipe Plan 414-B	22.1	28							2.476
13+60-A	8' x 3' Wood Box Culvert. Remove	6' x 3' x 24' Conc. Box Plan 1800	74.5							18.63	
21+25-A	18" Corr. Pipe	24" x 24' Conc. Pipe Plan 414-B	38.3		24						2.91
37+25-A		30" x 56' Conc. Pipe Plan 414-B	24.8			56					3.156
44-A		4' x 5' x 29' Conc. Box (Used as cattle pass) Plan 1801	13.6							22.298	
49-A		24" x 52' Conc. Pipe on skew Plan 414-B	43.05		52						3.709
57-A		24" x 40' Conc. Pipe Plan 414-B	8.8		40						2.816
43+51	18" Corr. Pipe Remove	24" x 48' Conc. Pipe Plan 414-B	48.6		48						2.816
58+88	24" x 18' Corr. Pipe Remove	30" x 24' Conc. Pipe Plan 414-B	28.3			24					3.25
81		18" x 40' Conc. Pipe & Ditch Crossing. Plan 415-A	21	40							0.802
82+25	Steel I-Beam 24' span 16' rdwy. Good condition. Use										
				328.05	68	164	80			40.748	21.935

DEPARTMENT OF PUBLIC WORKS

BUREAU OF HIGHWAYS

COUNTY CurmingNAME OF ROAD West Point-Crowell
DRAINAGE STRUCTURESPROJECT NO. 88 SEC. CFinal

STATION	OLD STRUCTURES	NEW STRUCTURE	SPECIAL EXC. <u>Class</u>	PIPE						CU. YDS. CONCRETE BOXES	CU. YDS. CONCRETE HEAD WALLS
				18	24	30	36	48	60		
	<i>in place.</i> <i>County to build</i> <i>conc. wings and</i> <i>abuts. Build</i> <i>guard rail on</i> <i>wings. Plan 1808</i>										
88+70	18"x24' Corr. Pipe Remove	18"x24' Conc. Pipe Plan 414-B	22.9	24							2.57
			350.95	92	164	80				10.928	24.505

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES
FINAL ESTIMATE

Name of Road West Point-Crowell Project No 88-C County Cuming
 Contractor Peterson, Shirley & Gunther Address Omaha, Nebraska.
Cuming County Date Aug. 1923

ORIGINAL QUANTITIES	UNITS	ITEMS	Overruns	Underruns	Item No.	Bid Price	AMOUNT
27482	Cu. Yds.	Earth Excavation	2285		1	\$0.31	\$8519.42
7443	" "	Clay "	3944		2	0.40	2977.20
100	" "	Special Excavation Class "B"		48	5	0.80	80.00
10000	Cu.Yd.Sta.	Overhaul	16782		7	0.02	200.00
6576	Cu.Yd.Mi.	Overhaul- Surfacing		108.7		0.40	2630.40

TOTAL AMOUNT \$14407.02

OVERRUNS

		Bid Price	AMOUNT
3285	Cu. Yds. Earth Excavation	\$0.31	\$1018.35
16782	Cu.Yd.Sta.Overhaul	0.02	335.64
3944	Cu.Yds. Clay Excavation	0.40	1577.60

UNDERRUNS

		Bid Price	AMOUNT	
108.7	Cu.Yd.Mi. Overhaul for Surfacing	\$0.40	\$43.48	\$2931.59
48	Cu.Yds. Class "B" Excavation	0.80	38.40	

CONTINGENCIES

Bid Price AMOUNT \$81.88

I hereby certify that the work represented by the above Quantities has been computed from measurements made by me or my predecessors, and that the work has been performed according to plans and specifications.

Total.....\$17256.73

Approved by.....

Previous Payments.....12114.00

Title.....

Approved by.....

Title.....

Amount Due.....\$5142.73

Note: Original quantities based on revised est.