



INDIVIDUAL CONSTRUCTION NOTES

JANUARY 2007

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JANUARY 2007

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SECTION A GENERAL NOTES

SHEET NO. 1-A

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SECTION A GENERAL NOTES

SHEET NO. 2-A

GENERAL NOTES LIST

- A01 - Existing Railroad Tracks Raised
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- A05 - Chain Link Fence
- A06 - Delineators and Chevrons
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- A23 - Erosion Checks
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- A26 - Erosion Control, Type "--"
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- A30 - Slope Protection Netting
- A31 - Area Inlet Sediment Filter
- A32 - Inlet Liner

SECTION A GENERAL NOTES

SHEET NO. 3-A

INFORMATION ONLY

CELL NAME

COMMON OMISSION:

On the Plan & Profile Sheet, show the profile for the Bridge Rail & below bridge for:
 the existing channel
 the new embankment
 the new grading

Include the boxed note "BRGR" on the Plan & Profile Sheets when embankment is detailed on the Bridge Plans

2-N Sheet: Add "Curb Inlet Detail" if there are curb inlets on the project.

**BRGR
STD.CEL**

For Details of Grading Section at Bridge Site, see Special Plan *.

Place Horizontally on Profile Portion of Plan & Profile Sheet. (Where applicable)

2-T Sheet: Add "Concrete Pavement Repair Details" if applicable.

Include the boxed note "DNSL" on any Plan or Plan & Profile Sheets when 2-L Sheets are covering an area in more detail.

**DNSL
STD.CEL**

For Details not shown see Sheet 2-L

Place Horizontally on Plan Portion of Plan & Profile Sheet.

Include the boxed note "DNSN" on any Plan or Plan & Profile Sheets when more information or a sketch is located on the 2-N (General Info.) Sheet.

**DNSN
STD.CEL**

For Details not shown see Sheet 2-N

Place Horizontally on Plan Portion of Sheet.

If a Temporary Road is visible on a Mainline Plan & Profile Sheet, and it has it's own Plan & Profile Sheet, include the boxed note "DNST".

**DNST
STD.CEL**

For Details not shown see Temporary Road Plan & Profile Sheet

Place Horizontally on Plan Portion of Plan & Profile Sheet.

If an Intersecting or Adjacent Highway is visible on a Mainline Plan & Profile Sheet, and it has it's own Plan & Profile Sheet, include the boxed note "DNSH".

**DNSC
STD.CEL**

For Details not shown see County Road Plan & Profile Sheet

Place Horizontally on Plan Portion of Plan & Profile Sheet.

If an Intersecting or Adjacent County Road is visible on a Mainline Plan & Profile Sheet, and it has it's own Plan & Profile Sheet, include the boxed note "DNSC".

**DNSH
STD.CEL**

For Details not shown see Highway -- Plan & Profile Sheet

Place Horizontally on Plan Portion of Plan & Profile Sheet.

NOTE: When modifying any of these "DNS" notes, do not change the width of the box, instead, add another line of text and adjust the height of the box.

Where new pavement becomes contiguous with existing pavement, it is not necessary to note on the plans: "Match Existing Grades".

ALIGNMENT INFORMATION ONLY

Any change in direction with a deflection angle of 1° or greater will require a horizontal curve.

For small deflection angles, curves should be long enough to avoid the appearances of kinks and should be at least 500 ft. long. The degree of curvature should not be less than 0° 15'.

**2H
STD.CEL**

Information for all stationed Horizontal Alignments are shown on Sheet 2-H.

Place Horizontally on Plan Portion of Sheet.

All horizontal curves of 0° 30' or greater requires a superelevation.

Current NDOR policy requires a 14 ft. width (2 ft. pavement widening) for inside lane of horizontal curves if:

- The degree of curvature is greater than 3°;
- The operating speed is 45 mph or greater;
- The roadway does not have surfaced shoulders;
- Projected average daily truck traffic is more than 50 per day.

**DNDT
STD.CEL**

STA. ___+___ TO STA. ___+___ ON RT.
DO NOT DISTURB TREES.

Place Horizontally on Plan Portion of Plan & Profile Sheet.

SECTION A GENERAL NOTES

SHEET NO. 4-A

INFORMATION ONLY

CELL NAME

Inform Drafting if a sketch will be required on the 2-T Sheet showing a longitudinal section of the highway at the R.R. X-ing. It may be req'd. to show Pavement Haunches if Concrete is less than 11" (Asphalt projects do not require a sketch). See Standard Detail 8350 5 E 01 for an example.

A01 Sta. ___+__
The Existing R.R. Tracks are to Be Raised __' By Others.

A02 Sta. ___+__
The Existing R.R. Tracks are to Be Lowered __' By Others.

Sheet 2-N is a General Information Sheet. (Shows Legend for Survey Symbols, Standard Notes, Sketches, Etc.)

A03 Sta. ___+__ to
Sta. ___+__ Rt.
Build Intercepting Dike, as Shown by Sketch on Sheet 2-N.

An Intercepting Dike parallels the roadway and an Earth Dike is transverse to a ditch.

*DIKE TYPICAL SECTION DETAILS
For an "Earth Dike" use the "edike" cell.
For an Intercepting Dike use the "dike" cell.
Both cells are found in the mast.cel cell library.*

A04 Sta. ___+__
Build Earth Dike to Elev. _____, as Shown by Sketch on Sheet 2-N.

Refer to Standard Detail 1920 5 E "Design of Intercepting Dike".

A05 Sta. ___+__ to
Sta. ___+__ Lt.
Build __ Lin. Ft. of _' Chain Link Fence. Plan 710-R_.

Refer to Standard Plan 901-R_, for spacing and locations of chevrons and delineators.

A06 Sta. ___+__ to
Sta. ___+__ Lt.
Build Highway Delineators, Type __. S=__'; __-Each & Install __-Chevrons. Plan 901-R_.

Normally, Delineators and Chevrons will not be required on curves of less than 1°.

A07 Sta. ___+__ to
Sta. ___+__ Rt.
Build Flexible Post Delineators S=__', __-Each. Plan 901-R_ and Special Plan _C.

SECTION A GENERAL NOTES

SHEET NO. 5-A

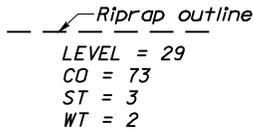
INFORMATION ONLY

CELL NAME

Add the Type of Rock Riprap to the note. See Chart below & the English Specification Book.



PATTERN NAME: DORRIP
 PATTERN SCALE = 1
 AA = 0°
 WT = 0



Broken Concrete Riprap does not have a type.

Note A09: Edit to read Station to Station and Side when used longitudinally along roadway, NOT at pipe ends.

Note A10: Use this note when Existing Riprap material is being removed and replaced. Applies to both Rock Riprap and Broken Concrete Riprap. Removal Note is NOT Required.

ROCK RIPRAP GRADATION REQUIREMENTS			
Size of Rock	Percent of Total Weight Smaller than the Given Size	Standard Item Number	Standard Reference Number
Type A 150 lb. 35 lb. 2 lb.	100 50 Not to exceed 10	6105.01	00914
Type B 300 lb. 80 lb. 5 lb.	100 50 Not to exceed 10	6105.02	00914
Type C 700 lb. 150 lb. 10 lb.	100 50 Not to exceed 10	6105.03	00914

Note A13: (Asphaltic Concrete Island Nose) the Pay Item is "EACH". (___ Lin. Ft is for info. to build)

It is not necessary to show Sq. Yds. (Asphalt is paid for by the 'TON')

If for some reason, a Sq. Yd. quantity is included in the note, the note will need a "For Information Only" Label

A08 Sta. ___+___
 Build ___ Tons Rock Riprap, Type __, as Shown by Sketch on Sheet 2-N.

A09 Sta. ___+___
 Build ___ Tons Broken Concrete Riprap, as Shown by Sketch on Sheet 2-N.

A10 Sta. ___+___
 Place ___ Tons Riprap, as Shown by Sketch on Sheet 2-N.

A11 Sta. ___+___ to
 Sta. ___+___
 Build ___ Lin. Ft. of Asphaltic Concrete Curb, as Shown by Sketch on Sheet 2-T.

A12 Sta. ___+___ to
 Sta. ___+___
 Build ___ Lin. Ft. of Asphaltic Concrete Island Curb. See Sheet 2-T.

A13 Sta. ___+___ to
 Sta. ___+___
 Build ___' of Asphaltic Concrete Island Nose. L= __. See Sheet 2-T.

A14 Sta. ___+___ to
 Sta. ___+___
 Build Asphaltic Concrete Median Surfacing. See Sheet 2-T.

SECTION A GENERAL NOTES

SHEET NO. 6-A

EROSION CONTROL INFORMATION			
EROSION CONTROL PAY ITEM	DESCRIPTION	WHERE USED	PLAN NUMBERS
Temporary Erosion Control	Straw or Excelsior Blanket	Phased Construction	Standard Plan 501-R- "Erosion Control"
Erosion Control - Class 2A	Synthetic Material Blanket	Final Erosion Control (Slope Only)	
Erosion Control - Class 2B	Synthetic Material Blanket	Final Erosion Control	
Erosion Control - Class 2C	Synthetic Material Blanket	Culvert Discharge Areas	
Erosion Control - Class 1B	Straw or Excelsior Blanket	Protect Shoulders	
Erosion Control, Type B-1	Coconut Netting	Protect Shoulders	
Erosion Control, Type B-2	Coconut Netting	Protect Shoulders	
Erosion Control - Class 1F	Coconut Blanket	Final Erosion Control	
Erosion Control - Class 1D	High Velocity Straw or Excelsior	Final Erosion Control	
Erosion Control - Class 1E	Coconut/Coir Fabric	Final Erosion Control	
Slope Protection Netting - Class 1A	Synthetic Netting	Over Mulch In Sand	
Erosion Checks	Bales of Hay/Straw	Ditches	
Erosion Checks - Class 2A	Bales of Hay/Straw with a Particular Erosion Control Fabric	Ditches	
Erosion Checks - Class 2B			
Erosion Checks - Class 2C			
Erosion Checks - Class 1B			
Erosion Checks - Class 1F			
Erosion Checks - Class 1D			
Erosion Checks - Class 1E			
Erosion Checks, Type ST	Bales of Hay/Straw with a Particular Erosion Control Fabric With Silt Traps (ST)	Ditches	Special Plan 5108 1 "Temporary Silt Checks"
Erosion Checks, Class ST-2A			
Erosion Checks, Class ST-2B			
Erosion Checks, Class ST-2C			
Erosion Checks, Class ST-1B			
Erosion Checks, Class ST-1F			
Erosion Checks, Class ST-1D			
Erosion Checks, Class ST-1E			
Fabric Silt Fence - Low Porosity	Filtration Material to stop silt	During Construction	Standard Plan 502 "Silt Fence Details"
Fabric Silt Fence - High Porosity			
Fabric Silt Fence - Low Profile Low Porosity			
Fabric Silt Fence - Low Profile High Porosity			
Fabric Silt Fence - Low Porosity, Type ST	Filtration Material to stop silt with Silt Traps (ST)	During Construction	
Fabric Silt Fence - High Porosity, Type ST			
Fabric Silt Fence, Type COIR Fiber	Biodegradable Coconut Fabric Silt Fence	Wetland Protection During Construction	
Fabric Silt Check	Speed Bumps For Water	Ditches	
Soil Grid (Cellular) Confinement	Heavy Duty Ditch Protection	Ditches	
Articulated Concrete	Heavy Duty Ditch Protection	Ditches	
Area Inlet Sediment Filter	Keeps Silt Out Of Area Inlet	Grate Inlets	Standard Detail 5480 5 "Inlet Liner Details"
Inlet Liner	Silt Protection For An Inlet	Inlet Protection	

ABBREVIATIONS:
 HV = High Velocity
 ST = Silt Trap

SECTION A GENERAL NOTES

SHEET NO. 7-A

INFORMATION ONLY

CELL NAME

FABRIC SILT FENCE

Generally Silt Fence only needs to be shown on the plans when protecting Wetlands, a Golf Course, Park Grounds or if located in an Urban area.

Unique situations, as determined by the NDDR Agronomist, may dictate that the Silt fence be shown on the plans.

Typically, for Rural Projects, Erosion Control Tabular Notes placed on the the 2-N Sheet will be sufficient.

*Standard Plan 502
"Silt Fence Details"*

- A15 *Sta. ___+__ to
Sta. ___+__ Rt.
Build ___ Lin. Ft. of Fabric
Silt Fence. Plan 502.*
- A16 *Sta. ___+__ to
Sta. ___+__ Rt.
Build ___ Lin. Ft. of Fabric
Silt Fence-High Porosity.
Plan 502.*
- A17 *Sta. ___+__ to
Sta. ___+__ Rt.
Build ___ Lin. Ft. of Fabric
Silt Fence, Type "Coir Fiber".
Plan 502*
- A18 *Sta. ___+__ to
Sta. ___+__ Rt.
Build ___ Lin. Ft. of Fabric
Silt Fence-Low Porosity.
Plan 502*
- A19 *Sta. ___+__ to
Sta. ___+__ Rt.
Build ___ Lin. Ft. of Fabric
Silt Fence-Low Profile High
Porosity. Plan 502*

SECTION A GENERAL NOTES

SHEET NO. 8-A

INFORMATION ONLY

CELL NAME

FABRIC SILT FENCE

*Standard Plan 502
"Silt Fence Details"*

A20 *Sta. ___+__ to
Sta. ___+__ Rt.
Build ___ Lin. Ft. of Fabric
Silt Fence-Low Profile Low
Porosity. Plan 502*

A21 *Sta. ___+__ to
Sta. ___+__ Rt.
Build ___ Lin. Ft. of Fabric
Silt Fence-High Porosity,
Type "ST". Plan 502*

A22 *Sta. ___+__ to
Sta. ___+__ Rt.
Build ___ Lin. Ft. of Fabric
Silt Fence-Low Porosity,
Type "ST". Plan 502*

EROSION CHECKS

*Special Plan 5100 1
"Erosion Checks (All Types) and Fabric Silt Checks"*

A23 *Sta. ___+__ to
Sta. ___+__ Rt.
Build Erosion Checks,
Type __. Spacing = __',
__-Bales Each, w/--Bales
Total. Special Plan _C.*

A24 *Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Lin. Ft. of Fabric
Silt Checks. Special Plan _C.*

SECTION A GENERAL NOTES

SHEET NO. 9-A

INFORMATION ONLY

CELL NAME

*Standard Plan 502
"Silt Fence Details"*

A25 *Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Lin. Ft. of
Temporary Silt Checks.
Special Plan _C.*

EROSION CONTROL

A26 *Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Sq. Yds. of Erosion
Control, Type "__".
(__' Width). Plan 501-R_*

*Standard Plan 501-R_
Erosion Control Covers
Classes 1A, 1B, 1C, 1D, 1E, 1F, 2A, 2B and
2C (Wood Excelsior, Straw and Coconut Mat)*

A27 *Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Sq. Yds. of Erosion
Control. (__' Width).
Plan 501-R_.*

Special Plan not required.... to be furnished by Mfg.

*The standard size for this material is 8' x 20'.
The material is available in 4", 6" & 8" depths.*

A28 *Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Sq. Yds. of Erosion
Control, Soil Grid Confinement
System (__" Depth/___' Width).*

TEMPORARY:
To be removed under the same contract.

A29 *Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Sq. Yds. of
Temporary Erosion Control.
(__' Width). Plan 501-R_*

SECTION A GENERAL NOTES

SHEET NO. 10-A

INFORMATION ONLY

CELL NAME

*Standard Plan 501-R_
"Erosion Control"*

A30 *Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Sq. Yds. of
Slope Protection Netting.
(__' Width). Plan 501-R_*

Detail furnished by Mfg. Contractor.

A31 *Sta. ___+__ Rt.
Build Area Inlet Sediment
Filter.*

*Standard Detail 5480 5
"Inlet Liner Details"*

A32 *Sta. ___+__ Rt.
Build Inlet Liner.
See Sketch on Sheet 2-N.*

SECTION B GUARDRAIL NOTES

SHEET NO. 1-B

GUARDRAIL NOTES SHEET INDEX

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SHEET 4-B	B04 - Crash Cushion Attenuating Terminal B05 - Install Impact Attenuator B06 - Build Impact Attenuator B07 - Inertial Barriers B08 - Reset Guardrail B09 - Remove and Salvage Guardrail (Sta. to Sta.) B10 - Remove and Salvage Guardrail (Sta.)
SHEET 5-B	B11 - Cable Guardrail Terminal Anchorage Sections

SECTION B GUARDRAIL NOTES

SHEET NO. 2-B

GUARDRAIL NOTES LIST

- B01 - W-Beam and Thrie-Beam Guardrail
- B02 - W-Beam Guardrail
- B03 - Safety Beam Guardrail
- B04 - Crash Cushion Attenuating Terminal
- B05 - Install Impact Attenuator
- B06 - Build Impact Attenuator
- B07 - Inertial Barriers
- B08 - Reset Guardrail
- B09 - Remove and Salvage Guardrail (Sta. to Sta.)
- B10 - Remove and Salvage Guardrail (Sta.)
- B11 - Cable Guardrail Terminal Anchorage Sections

SECTION B GUARDRAIL NOTES

SHEET NO. 3-B

INFORMATION ONLY

SAFETY BEAM GUARDRAIL SPECIAL PLANS	
Plan	Plan Description
Special Plan 7040 I	Bridge Approach Section (Includes W-Three Beam Transition Section)
Special Plan 7044 I	W-Three Beam Transition Section (Paid for as 1-Ea. when separate from B.A.S.)
Special Plan 7041 I	Special Bridge Approach Section (Three-Beam Rail)
Design Guide 7774 6	Guardrail End Treatment, Type I (ET-2000)
Design Guide 7775 6	Guardrail End Treatment, Type I (BEST)
Design Guide 7776 6	Guardrail End Treatment, Type I (SKT-350)
Design Guide 7772 6	Guardrail End Treatment, Type II (SRT-75)
Design Guide 7773 6	Guardrail End Treatment, Type II (SRT-350)
Design Guide 7779 6	Guardrail End Treatment, Type II (FLEAT)
Special Plan 7071 I	Bull Nose (12.5' Tapered)
Special Plan 7075 I	Bull Nose (12.5' Parallel)
Special Plan 7044 I	Hardware Details (Includes W-Three Beam Transition Section)
Special Plan 7043 I	Guardrail Location Tables
Special Plan 7045 I	End Anchorage Assemblies
Special Plan 7771 I	M.E.L.T. (Used by permission only) (Not normally used on State Highways)

CELL NAME

B01 Sta. ___+__
Build ___ Lin. Ft. of W-Beam
Guardrail & ___ Lin. Ft. of
Three-Beam Guardrail.
Special Plan _C.

B02 Sta. ___+__
Build ___ Lin. Ft. of
W-Beam Guardrail.
_ - Bridge Approach Sections.
_ - Special Bridge Approach
Section.
_ - Guardrail End Treatment,
Type I.
_ - Guardrail End Treatment,
Type II.
_ - Bullnose End Treatment
(Tapered)
_ - Bullnose End Treatment
(Parallel)
_ - W-Three Beam Transition
Section.
_ - End Anchorage Assemblies.
_ - Alternate End Anchorage
Assemblies.
_ - Culvert Mounted Guardrail
Posts.
_ - Concrete Anchor Blocks.
_ - Controlled Releasing
Terminal Posts (CRT).
Special Plan _C.

SAFETY BEAM GUARDRAIL INFORMATION

If you are describing only one corner of a bridge this note should read Sta. to Sta. (Rt. or Lt.)

Include totals of all Guardrail items in one note for each bridge. If there is a Guardrail Installation Special Plan, you do not need (Table "*") in the construction note. Tables will be identified on Guardrail Installation Special Plan. In overpass situations, use 1-Guardrail note for the stationed centerline over the bridge and 1-Guardrail note for the stationed centerline that goes under the bridge to protect abutments or piers.

When dealing with "Nested Guardrail", include the additional length in the "Build ___ Lin. Ft. of W-Beam Guardrail" note and let the Guardrail Installation Special Plan show the details of the "nesting".

REMODEL BRIDGE CURB note should be addressed with the Bridge note.

If you do not have a Pay Length, the Guardrail note should be written as note B03.

If CONCRETE ANCHOR BLOCKS are required, they should be included with the guardrail note.

Installation of Impact Attenuator System
INSTALL - when furnished by the state.
BUILD - when furnished by the contractor.

Inertial Barriers (Fitch Barrels) TEMPORARY
installation by Traffic Engineer.

End Treatments for W-Beam Guardrail (Paid, 1-Each)

Guardrail End Treatment, Type I - Used for 65 mph and above for parallel installations or 25:1 Taper Rates. All rectangular heads on the ends of parallel or 25:1 tapers.
ET-2000 (LET or PLUS) - Extruding Terminal
BEST - Beam Eating Safety Terminal
SKT 350 - Sequential Kinking Terminal

Guardrail End Treatment, Type II - Used for 65 mph and lower and on 15:1 Taper Rates.
SRT 350 - Curved Slotted Rails
FLEAT - Flared Energy Absorbing Terminal, a tangent (Rectangular Head, Tapered)
SRT 75 - Three short Slots in the Rail

When building a Cable to Safety Beam Guardrail Transition Section, you do not need a special build note. This will show up on the Guardrail Installation Plan.

For more information refer to the Nebraska Department of Roads' "Guide to Guardrail Pay Items" document.

B03 Sta. ___+__
Build Safety Beam Guardrail.
_ - Bridge Approach Sections.
_ - Guardrail End Treatment,
Type I
_ - Guardrail End Treatment,
Type II.
Special Plan _C.

SECTION B GUARDRAIL NOTES**SHEET NO. 4B****INFORMATION ONLY****CELL NAME**

Installation of Impact Attenuator System
 INSTALL - when furnished by the state.
 BUILD - when furnished by the contractor.

Inertial Barriers (Fitch Barrels) TEMPORARY
 installation by Traffic Engineer.

CRASH CUSHION ATTENUATING TERMINAL
 SYRO-CRASH-CUSHION ATTENUATING TERMINAL
 SENTRE-CRASH-CUSHION ATTENUATING TERMINAL

IMPACT ATTENUATORS

QUADGUARD
 TRACC
 REACT 350

INERTIAL BARRIERS

Fitch Barrels - See Examples in Drafting Room.
 Refer to Fitch Barrels as "Inertial Barrier".

"Temporary Inertial Barrier" Does not need a note as
it will be handled on plans from TRAFFIC ENGINEERING.

Two notes are required for Remove and Reset Guardrail:
 1-Note to Remove & Salvage Guardrail, and
 1-Note to Reset Guardrail.

To reset Guardrail, the stationing includes the End
Sections, if reusing the existing T.A.S.

If you are going to 'Salvage' Guardrail, do so for the
entire installation, not just part of the installation.

Guardrail Lengths must be the same to combine in one
note, otherwise you need separate notes.

RESETTING CABLE GUARDRAIL ONLY

Regarding the Standard Plan that was used to
build the existing installation :

The old Standard Plan No. must be blocked
out and made into a Special Plan --C with
the words 'FOR INFORMATION ONLY' placed
above the title.

The Special Plan used to Reset the cable guardrail is
our current Cable Guardrail Plan.

"SN25" from the 'std.cel' cell library:

- The existing Cable Guardrail was constructed in accordance with the details shown on "For Information Only Special Plan #C". The Contractor shall reset the guardrail in accordance with Standard Plan 702-R..

Additional Guardrail Removal Notes are found in the
Removal Note Section:

- H13 - Remove Guardrail (Station)
- H14 - Remove Guardrail (Station to Station)
- H15 - Remove Guard Posts

B04 Sta. ___+__
 Install -- Crash Cushion
 Attenuating Terminal.
 Special Plan _C.

B05 Sta. ___+__
 Install --Impact Attenuators.
 Special Plan _C.

B06 Sta. ___+__
 Build --Impact Attenuators.
 Special Plan _C.

B07 Sta. ___+__
 Build Inertial Barriers.
 Special Plan _C.

B08 Sta. ___+__ to
 Sta. ___+__ Lt.
 Reset -- Lin. Ft. of
 Guardrail. Special Plan _C.
 (Includes --Terminal
 Anchorage Sections).

B09 Sta. ___+__ to
 Sta. ___+__ Lt.
 Remove and Salvage _ Lin. Ft.
 of Guardrail.

B10 Sta. ___+__
 Remove and Salvage _ Lin. Ft.
 of Guardrail.

SECTION B GUARDRAIL NOTES

SHEET NO. 5-B

INFORMATION ONLY

CELL NAME

INTERMEDIATE ANCHORAGE SECTION

Intermediate Anchorage Section is required when pay length is over 2000 Lin. Ft.

When building Guardrail Sta. to Sta., the length will not include the Terminal Anchorage Sections.

B11 Sta. ___+__ to
Sta. ___+__ Lt.
Build __ Lin. Ft. of
Cable Guardrail. _-Terminal
Anchorage Sections.
_-Intermediate Anchorage
Section. Special Plan _C.

SECTION C1 PIPE POLICY NOTES

SHEET NO. 1-C1

POLICY NOTES SHEET INDEX

SHEET 1-C1	PIPE POLICY NOTES SHEET INDEX
SHEET 2-C1	PIPE POLICY NOTES LIST
SHEET 3-C1	PPE01 - Build Culvert Pipe, Type 2, Class "1", Class "1" Bedding (Railroad) PPE02 - Build Culvert Pipe, Type 2, Jacked (Railroad) PPE03 - Build Culvert Pipe w/F.E.S.'s PPE04 - Build Culvert Pipe w/F.E.S. on Inlet & Outlet in Conc. Box Culv.
SHEET 4-C1	PPE05 - Build Jacked Culvert Pipe, Type 1 or 2, Class "1" PPE06 - Build Culvert Pipe as Median Structure PPE07 - Remove Bridge & Build Culvert Pipe PPE08 - Build Culvert Pipe w/F.E.S. on Inlet & Outlet in Exist. C.B.C. (Tap)
SHEET 5-C1	PPE09 - Build Culvert Pipe w/Headwall & w/Overhang PPE10 - Build Culvert Pipe w/Headwall & w/Splash Basin PPE11 - Build Round Equivalent Culvert Pipe w/F.E.S. PPE12 - Build Round Equivalent Culvert Pipe w/Headwalls
SHEET 6-C1	PPE13 - Build Culvert Pipe & Headwalls PPE14 - Build Twin Culvert Pipe & Headwalls PPE15 - Build Twin Culvert Pipe w/Flared End Sections PPE16 - Build Twin Culvert Pipe on Skew & Headwalls
SHEET 7-C1	PPE17 - Remove R.C.P. & Build Culvert Pipe w/F.E.S.'s PPE18 - Build Culvert Pipe w/F.E.S.'s & Bar Grate PPE19 - Build Culvert Pipe w/F.E.S. on Inlet & Outlet in Stubout
SHEET 8-C1	PPE20 - Build Culvert Pipe w/F.E.S.'s and Build Culvert Pipe as Stubout PPE21 - Build Culvert Pipe for Median Structure w/F.E.S., Bar Grate & Stubout PPE22 - Build Culvert Pipe as Irrigation Structure PPE23 - Build Concrete Flume Type "1" w/Culvert Pipe
SHEET 9-C1	PPE24 - Lay Driveway Culvert Pipe & Build Earth Drive PPE25 - Lay Driveway Culvert Pipe & Build Earth Drive & Surface. See Sheet 2-S PPE26 - Build Culvert Pipe for Crossover PPE27 - Install Twin Culvert Pipe for Temporary Road PPE28 - Build Twin Culvert Pipe for Temporary Road
SHEET 10-C1	PPE29 - Build Culvert Pipe & Extend w/Temp. Culvert Pipe PPE30 - Build Round Equivalent Storm Sewer Pipe PPE31 - Build Storm Sewer Pipe PPE32 - Build Sanitary Sewer Pipe
SHEET 11-C1	CULVERT PIPE LEGEND

SECTION C1 PIPE POLICY NOTES

SHEET NO. 2-C1

PIPE POLICY NOTES LIST

- PPE01 - Build Culvert Pipe, Type 2, Class "-", Class "-" Bedding
- PPE02 - Build Culvert Pipe, Type 2, Jacked
- PPE03 - Build Culvert Pipe w/F.E.S.'s
- PPE04 - Build Culvert Pipe w/F.E.S. on Inlet & Outlet in Conc. Box Culv.
- PPE05 - Build Jacked Culvert Pipe, Type 1 or 2, Class "-"
- PPE06 - Build Culvert Pipe as Median Structure
- PPE07 - Remove Bridge & Build Culvert Pipe
- PPE08 - Build Culvert Pipe w/F.E.S. on Inlet & Outlet in Exist. C.B.C. (Tap)
- PPE09 - Build Culvert Pipe w/Headwall & w/Overhang
- PPE10 - Build Culvert Pipe w/Headwall & w/Splash Basin
- PPE11 - Build Round Equivalent Culvert Pipe w/F.E.S.
- PPE12 - Build Round Equivalent Culvert Pipe w/Headwalls
- PPE13 - Build Culvert Pipe & Headwalls
- PPE14 - Build Twin Culvert Pipe & Headwalls
- PPE15 - Build Twin Culvert Pipe w/Flared End Sections
- PPE16 - Build Twin Culvert Pipe on Skew & Headwalls
- PPE17 - Remove R.C.P. & Build Culvert Pipe w/F.E.S.'s
- PPE18 - Build Culvert Pipe w/F.E.S.'s & Bar Grate
- PPE19 - Build Culvert Pipe w/F.E.S. on Inlet & Outlet in Stubout
- PPE20 - Build Culvert Pipe w/F.E.S.'s and Build Culvert Pipe as Stubout
- PPE21 - Build Culvert Pipe for Median Structure w/F.E.S., Bar Grate & Stubout
- PPE22 - Build Culvert Pipe as Irrigation Structure
- PPE23 - Build Concrete Flume Type "-" w/Culvert Pipe
- PPE24 - Lay Driveway Culvert Pipe & Build Earth Drive
- PPE25 - Lay Driveway Culvert Pipe & Build Earth Drive & Surface. See Sheet 2-S
- PPE26 - Build Culvert Pipe for Crossover
- PPE27 - Install Twin Culvert Pipe for Temporary Road
- PPE28 - Build Twin Culvert Pipe for Temporary Road
- PPE29 - Build Culvert Pipe & Extend w/Temp. Culvert Pipe
- PPE23 - Build Round Equivalent Storm Sewer Pipe
- PPE31 - Build Storm Sewer Pipe
- PPE32 - Build Sanitary Sewer Pipe

SECTION C I PIPE POLICY NOTES

SHEET NO. 3-CI

INFORMATION ONLY

CELL NAME

RAILROAD CULVERT PIPE

REQUIRED PIPE LENGTHS UNDER R.R. TRACKS
(Jacking may be required)
 Ⓢ R.R. to end of pipe - 15' Minor Tracks
 Ⓢ R.R. to end of Pipe - 25' Major Tracks

Class IV or Class V Pipe may be required in areas of excessive fill or under R.R. tracks.
Bedding Sketch is required on Culvert X-Sec.

PPE01

Sta. ___+___
 DA=___Ac., Q__=___cfs, HW=___'
 Build ___" x ___' Culvert Pipe
 Pipe, Type 2. Class __,
 Class "___" Bedding w/Flared
 End Sections. Plan 410-R_ &
 Special Plan _C. Fill= ___'.
 Exc.=___ Cu. Yds.

Length of Pipe Partially Jacked

Class IV or Class V Pipe may be required in areas of excessive fill or under Railroad Tracks

Designer should review Design Pipe Material Policy Flow Chart for Pipe Type and placement restrictions

PPE02

Sta. ___+___
 Build ___" x ___' Culvert Pipe
 Type 2, (Includes ___' Jacked
 Culvert Pipe, Type 2
 Class __).
 Special Plans _C & _C.
 Fill= ___'. Exc.=___ Cu. Yds.

The Culvert Pipe notes are typical and cover several situations. Edit out information that does not apply.

NOTE: Q__, D.A. and H.W. required on all crossroad culvert construction notes.

- Q__ - Design Discharge (c.f.s.)
Subscript indicates storm frequency used.
- D.A. - Drainage Area in Acres.
- H.W. - Design Headwater, depth of flow measured from the flow line of the inlet.

If drainage information cannot be determined, the following note should be used:
 Design Discharge (Q) and Drainage Area (D.A.) cannot be determined by office means unless otherwise noted on the plans.

NOTE:
Broken back reference will NOT be made on new pipes.

- B.B. - Broken Back
- DBL. B.B. - Double Broken Back

A bend on a concrete pipe can be either Vertical or Horizontal. However, DO NOT specify Horizontal or Vertical when calling for an elbow or a collar with a bend.

BOX CULVERTS with Bends or Breaks:

- Bends are horizontal
- Breaks are vertical.

You DO NOT have to call out the ° of Bend or Break on preliminary culvert notes.

CULVERT PIPE

PPE03

Sta. ___+___
 DA=___Ac., Q__=___cfs, HW=___'
 Build ___" x ___' Culvert Pipe
 Type 2, 3, 4, 5, 7 or 8
 w/Flared End Sections.
 Plan 410-R_ & Special Plan _C.
 Fill= ___'. Exc.=___ Cu. Yds.

PPE04

Sta. ___+___
 DA=___Ac., Q__=___cfs, HW=___'
 Build ___" x ___' Culvert Pipe
 Type 2, 3, 4, 5, 7 or 8
 w/Flared End Section on Inlet
 & Outlet in Concrete Box
 Culvert, ___° Elbow.
 Plans 410-R_, 425-R_ &
 Special Plan _C. Fill= ___'.
 Exc.=___ Cu. Yds.

SECTION C I PIPE POLICY NOTES

SHEET NO. 4C1

INFORMATION ONLY

CELL NAME

CULVERT PIPE

*Full Length of Pipe Jacked.
If R.C.P. Class -- is to be Jacked, it must be stated
in the note.*

PPE05 *Sta. ---+--
Build --" x --' Jacked
Culvert Pipe, Type 1 or 2
Class --. Special Plan _C
Fill= --'. Exc.=-- Cu. Yds.*

*No Excavation Quantity is required for Median
Structures in new embankment.*

PPE06 *Sta. ---+--
Build --" x --' Culvert Pipe
Type 2, 3, 4, 5, 7 or 8 as
Median Structure with Flared
End Sections. Plan 410-R_ &
Special Plan _C. Fill= --'.*

Structures in existing medians DO require excavation.

*If you remove pipe from an 'Existing' Median Structure,
you need to pay for excavation.*

*Excavation is not to be paid for when installing new Flared
End Sections directly on existing pipes.*

PPE07 *STA. ---+--
---' SPAN TIMBER BRIDGE
WD. FLOOR, W/--' CLEAR RDWY.
DA=--Ac., Q__=--cfs, HW=--'
Remove & Build --" x --'
Culvert Pipe, Type 2, 3, 4, 5,
7 or 8 and Headwalls.
---° Elbow. Plan 425-R_
& Special Plans _C & _C.
Fill= --'. Exc.=-- Cu. Yds.*

NOTE:
*WHEN USING EXTEND PIPE NOTES, WHEN FILL IS GREATER THAN 10',
THE NOTE SHOULD INCLUDE:
Fill=--'.*

PPE08 *Sta. ---+--
DA=--Ac., Q__=--cfs, HW=--'
Build --" x --' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8 with
Flared End Section on Inlet,
and Outlet in Existing
Conc. Box Culvert. _-Tap,
---° Elbow. Plans 410-R_,
425-R_, 428-R_ &
Special Plan _C. Fill= --'.
Exc.=-- Cu. Yds.*

*Only pay for a tap if tapping into an existing Inlet,
Culvert or Box Culvert.*

SECTION C1 PIPE POLICY NOTES

SHEET NO. 5-C1

INFORMATION ONLY

CELL NAME

CULVERT PIPE

If you are phasing the construction of a drainage structure, handle on the drainage cross sections, with dimensions, stating Phase 1, Phase 2. DO NOT phase the construction notes in the plans.

PPE09 Sta. ___+__
 DA=__Ac., Q__=__cfs, HW=__'
 Build __" x __' Culvert Pipe,
 Type 2, 3, 4, 5, 7 or 8 and
 Headwall on Inlet, with
 Overhang on Outlet, Type "__".
 Special Plans _C & _C.
 Fill= __'. Exc.=__ Cu. Yds.

Designer should review Design Pipe Material Policy Flow Chart for Pipe Type and placement restrictions

PPE10 Sta. ___+__
 DA=__Ac., Q__=__cfs, HW=__'
 Build __" x __' Culvert Pipe,
 Type 2, 3, 4, 5, 7 or 8 and
 Headwall on Inlet, ___°
 Elbow, with Splash Basin on
 Outlet, as Shown by Sketch
 on Sheet 2-N. Plan 425-R_ &
 Special Plan _C & _C.
 Fill= __'. Exc.=__ Cu. Yds.

The Round Equivalent notes are typical and cover several situations. Edit out any Pipe type that does not apply.

PPE11 Sta. ___+__
 DA=__Ac., Q__=__cfs, HW=__'
 Build __" x __' Round
 Equivalent Culvert Pipe,
 Type 2, 3, 4 or 5 with Flared
 End Sections. Plan 410-R_ &
 Special Plan _C. Fill= __'.
 Exc.=__ Cu. Yds.

*Round Equivalent Pipe:
 Pipe-Arch: Concrete & Corrugated Metal
 Elliptical Pipe: Concrete only*

Refer to Sheet 3-C2 for Pipe-Arch to Round Equivalent conversion table and example notes.

If the Headwall Special Plan allows for the construction of different types of Headwalls, the type must be addressed in the note.

PPE12 Sta. ___+__
 DA=__Ac., Q__=__cfs, HW=__'
 Build __" x __' Round
 Equivalent Culvert Pipe, Type
 2, 3, 4 or 5 & Headwalls.
 Special Plans _C & _C.
 Fill= __'. Exc.=__ Cu. Yds.

SECTION C I
INFORMATION ONLY

PIPE POLICY NOTES
CELL NAME

SHEET NO. 6-CI

CULVERT PIPE

PPE13 Sta. ___+__
DA=__Ac., Q__=__cfs, HW=__'
Build __" x __' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8
and Headwalls.
Special Plans _C & _C.
Fill= __'. Exc.=__ Cu. Yds.

If Headwall Type is required, please note after
the word Headwalls.

PPE14 Sta. ___+__
DA=__Ac., Q__=__cfs, HW=__'
Build Twin __" x __' Culvert
Pipe, Type 2, 3, 4, 5, 7 or 8
and Headwalls.
Special Plans _C & _C.
Fill= __'. Exc.=__ Cu. Yds.

WHEN DESCRIBING MULTIPLE PIPES:
Use the 'word' for the number of pipes,
NOT the number. (i.e. Twin, Triple, etc.)

PPE15 Sta. ___+__
DA=__Ac., Q__=__cfs, HW=__'
Build Twin __" x __' Culvert
Pipe, Type 2, 3, 4, 5, 7 or 8
w/Flared End Sections. Plan
410-R_ & Special Plan _C.
Fill= __'. Exc.=__ Cu. Yds.

Multiple Pipes having Flared End Sections require a
sketch showing the dimensions between the pipes
(usually on drainage cross-sections).

PPE16 Sta. ___+__
DA=__Ac., Q__=__cfs, HW=__'
Build Twin __" x __' Culvert
Pipe, Type 2, 3, 4, 5, 7 or 8
on __° Skew and Headwalls.
Special Plans _C & _C.
Fill= __'. Exc.=__ Cu. Yds.

SECTION C I
INFORMATION ONLY

PIPE POLICY NOTES
CELL NAME

SHEET NO. 7-CI

CULVERT PIPE

- PPE17 STA. ___+___
___" x ___' REINF. CONC.
PIPE W/HDWLS.
DA=___Ac., Q__=___cfs, HW=___'
Remove & Build ___" x ___'
Culvert Pipe, Type 2, 3, 4, 5,
7 or 8 with Flared End
Sections. Plan 410-R_ &
Special Plan _C.
Fill= ___'. Exc.=___ Cu. Yds.
- PPE18 Sta. ___+___
DA=___Ac., Q__=___cfs, HW=___'
Build ___" x ___' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8 with
Flared End Sections & Build
Bar Grate on Inlet. Plans
410-R_, 413-R_ & Special
Plan _C. Fill= ___'.
Exc.=___ Cu. Yds.
- PPE19 Sta. ___+___ Lt. to
Sta. ___+___ Lt.
Build ___" x ___' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8 with
Flared End Section on
Inlet & Outlet in Stubout,
___° Elbow, - Concrete
Collar. Plans 410-R_, 425-R_
& Special Plan _C.
Fill= ___'. Exc.=___ Cu. Yds.

SECTION C I
INFORMATION ONLY

PIPE POLICY NOTES
CELL NAME

SHEET NO. 8-CI

CULVERT PIPE

PPE20 *Sta. ----+--
DA=--Ac., Q_ =--cfs, HW=--'
Build --" x --' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8 with
Flared End Sections and
Build --" x --' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8, as
Stubout. Plan 410-R_ &
Special Plan _C.
Fill= --'. Exc.=-- Cu. Yds.*

PPE21 *Sta. ---+--
Build --" x --' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8 for
Median Structure, with Flared
End Section & Build Bar
Grate on Inlet with Outlet in
Stubout, 1-Concrete Collar.
Plans 410-R_, 413-R_, 425-R_.
& Special Plan _C. Fill= --'.*

PPE22 *Sta. ---+--
Build --" x --' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8
as Irrigation Structure on
--° Skew w/Siphon Headwalls.
Plan 414 & Special Plan _C.
Fill= --'. Exc.=-- Cu. Yds.*

*If it is an Irrigation Pipe, it needs to be
stated in the note.*

CULVERT PIPE FOR FLUMES

PPE23 *Sta. ---+-- Lt.
Build Concrete Flume, Type --
with ---" x --' Culvert Pipe,
Type 3, 4, 5 or 6.
Special Plans _C & _C.*

*The Culvert Pipe for Flumes need to have
a corrugated interior.*

SECTION C I PIPE POLICY NOTES

SHEET NO. 9-CI

INFORMATION ONLY

CELL NAME

CULVERT PIPE FOR RURAL DRIVE

"Lay" Driveway Pipes &
"Build" Road/Crossroad Pipes.

PPE24 *Sta. ___+__ Lt.
Lay __" x __' Driveway
Culvert Pipe, Type 2, 3, 4, 5,
6, 7 or 8 & Build Earth Drive
(__' Wide) on __% Grade.*

If Temporary Culvert Pipe is to be furnished by the State, use the term 'Install' rather than 'Build'. The Designer should check with the District when specifying type.

PPE25 *Sta. ___+__ Lt.
Lay __" x __' Driveway
Culvert Pipe, Type 2, 3, 4, 5,
6, 7 or 8 & Build Earth
Drive (__' Wide) on __%
Grade & Surface.
See Sheet 2-S.*

If Temporary Culvert Pipe is to be Salvaged and Removed, the Designer should check with the District for Culvert Type.

*Remove Temporary Road with item
Excavation (Established Quantity). Pipe removal is
subsidiary to "Excavation Established Quantity".*

*DO NOT call for the Temporary Pipes to be removed.
The removal of pipes will be subsidiary to the obliteration
of the Temporary Road. It will be noted in the Spec's
if it is to be Salvaged.*

CULVERT PIPE FOR CROSSOVERS

*Show Embankment Quantity required to build
Temporary Road with Earthwork Note.*

PPE26 *Sta. ___+__ to
Sta. ___+__
Build __" x _' Culvert Pipe,
Type 2, 3, 4, 5, 7 or 8.
Special Plan -C. Fill= __'.*

*Use the term 'Install' if the pipe is to be furnished
by the State.*

*Use the term 'Build' if the pipe is to be furnished
by the Contractor.*

CULVERT PIPE FOR TEMPORARY ROADS

*Do NOT place build note for Temporary Road surfacing on
plans. Details may be shown on the 2-T Sheet.*

PPE27 *Sta. ___+__
Install Twin __" x __'
Culvert Pipe, Type 2, 3, 4, 5,
7 or 8. Special Plan -C.
Fill= __'.*

*Normally a Temporary Road will have it's own unique ℓ
stationing (i.e. 7000), also it's own plan & profile sheet
and has a Typical Section drawn on the 2-T Sheets.*

*The Temporary Road ℓ is shown, and labeled on the project
plan & profile sheet. Temporary Road details should NOT
be shown on the mainline plans.*

Add this note to the mainline plans:

PPE28 *Sta. ___+__
Build Twin __" x __'
Culvert Pipe, Type 2, 3, 4, 5,
7 or 8. Special Plan -C.
Fill= __'.*

**DNST
STD.CEL**

For Details not shown see Temporary Road Plan & Profile Sheet

Place Horizontally on Plan Portion
of Plan & Profile Sheet.

SECTION C I PIPE POLICY NOTES

SHEET NO. 10-C1

INFORMATION ONLY

CELL NAME

CULVERT PIPE FOR TEMPORARY ROADS

PPE29 Sta. ___+__
 Build ___" x __' Culvert
 Pipe, Type 2, 3, 4, 5, 7 or 8,
 with Flared End Sections,
 Plan 410-R. Special Plan _C.
 Fill= __'. Exc.=__ Cu. Yds.
 (Extend with __' Temp. Culv.
 Pipe, Type 2, 3, 4, 5, 7 or 8
 on Lt. Special Plan _C.
 Fill= __'.)

CULVERT PIPE FOR SEWERS

Pay quantity for new pipe extends to center of new pipe or M.H., Inlet, etc.

PPE30 Sta. ___+__
 Build ___" x __' Round
 Equivalent Storm Sewer Pipe,
 Type 1 with Inlet & Outlet in
 Curb Inlet. Special Plan _C.
 Fill= __'.

Excavation is subsidiary for Sewers, Junction Boxes, Catch Basins, Inlets, Retaining Walls & Steps.

PPE31 Sta. ___+__
 Build ___" x __' Storm
 Sewer Pipe, Type 1, 7 or 8
 with Inlet & Outlet in Curb
 Inlet. Special Plan _C.
 Fill= __'.

Utility Companies can specify the culvert type required.

PPE32 Sta. ___+__
 Build __" x __' Sanitary
 Sewer Pipe, Type 1, 7 or 8
 with Inlet and Outlet in
 Junction Box. Fill= __'.

SECTION C I PIPE POLICY NOTES

SHEET NO. I-CI

CULVERT PIPE LEGEND

**CPL
STD.CEL**

CULVERT PIPE LEGEND		
	TYPE	DESCRIPTION
1	RCSP	Reinforced Concrete Sewer Pipe
2	RCP	Reinforced Concrete Pipe
3	GCCMP	Galvanized (zinc) Coated Corrugated Metal Pipe
4	ACCMP	Aluminum Coated Corrugated Metal Pipe
5	PCCMP	Polymer Coated Corrugated Metal Pipe
6	HDPE-CI	High Density Polyethylene (corrugated Interior)
7	HDPE-SI	High Density Polyethylene (smooth Interior)
8	PVC	Polyvinyl Chloride Pipe

The Culvert Pipe Legend (CPL) is found in the "STD.CEL" cell library

SECTION C2 CULVERT NOTES

SHEET NO. 1-C2

CULVERT NOTES SHEET INDEX

SHEET 1-C2	GENERAL NOTES SHEET INDEX
SHEET 2-C2	GENERAL NOTES LIST
SHEET 3-C2	EXAMPLE NOTES FOR PIPE-ARCH OR ELLIPTICAL PIPES
SHEET 4-C2	GENERAL INFORMATION
SHEET 5-C2	C01 - Build R.C.P. w/F.E.S.'s C02 - Build R.C.P. w/F.E.S. on Inlet & Outlet in Conc. Box. Culv. C03 - R.C.P. - Remove Headwalls, Build Concrete F.E.S.'s C04 - Build R.C.P. - Class "1" Bedding w/Concrete F.E.S.'s
SHEET 6-C2	C05 - Build R.C.P (Includes Jacked R.C.P.) C06 - Build Jacked R.C.P. C07 - Build R.C.P. As Median Structure C08 - Remove Bridge and Build R.C.P. C09 - Build Round Equivalent R.C.P.
SHEET 7-C2	C10 - Build R.C.P. w/F.E.S. on Inlet & Outlet in Conc. Box Culv. C11 - Extend R.C.P. & Build Concrete F.E.S. C12 - C.M. Pipe w/Hdws. - Remove Headwalls & Extend
SHEET 8-C2	C13 - Build C.M. Pipe w/Headwall on Inlet & Overhang on Outlet C14 - Build C.M. Pipe w/Headwall on Inlet & Splash Basin on Outlet C15 - Remove C.M. Pipe w/Drop Inlet C16 - Build Round Equivalent
SHEET 9-C2	C17 - C.M. Pipe - Remove and Install Flared End Sections C18 - Rd. Equiv. Pipe - Remove Headwall and Extend C19 - C.M. Pipe w/Hdws. - Remove Hdws. & Build F.E.S. C20 - Build Culvert Pipe & Hdws. C21 - Build Twin Culvert Pipe w/F.E.S.
SHEET 10-C2	C22 - Build Twin Culvert Pipe on Skew C23 - Remove R.C.P. and Build Culvert Pipe C24 - Build Culvert Pipe w/F.E.S.'s. & Bar Grate on Inlet C25 - (Salvage) Remove & Relay C.M. Pipe & Build Conc. Pipe w/F.E.S.'s
SHEET 11-C2	C26 - Remove C.M. Pipe & Build Conc. Box Culv. C27 - Conc. Box Culv. - Remove Endwalls & Extend C28 - Conc. Box Culv. - Remove Endwalls and Extend C29 - Conc. Box Culv. - Plug Ends and Abandon C30 - Conc. Box Culv. - Sandfill
SHEET 12-C2	C31 - Build Conc. Box Culv. C32 - Conc. Box Culv. - Remove Endwalls & Extend C33 - Build Concrete Box Culvert w/C.M.P. Stubout C34 - Build C.M. Pipe w/Metal F.E.S. on Inlet and Outlet in Stubout
SHEET 13-C2	C35 - Build R.C.P. w/Conc. F.E.S.'s & Build R.C.P. Stubout C36 - Build R.C.P. for Median Structure w/Conc. F.E.S. & Outlet in Stubout C37 - Build R.C.P. as Irrigation Structure C38 - Build Steel Irrigation Structure (Permit No.)
SHEET 14-C2	C39 - Original Design/Alternate Design Conc. Box Culv.
SHEET 15-C2	PRELIMINARY PIPE NOTES: C40 - C.M. Pipe w/Hdws. C41 - C.M. Pipe w/F.E.S. C42 - C.M. Pipe w/Drop Inlet C43 - R.C.P. w/Hdws. C44 - R.C.P. w/F.E.S. C45 - B.B. R.C.P. w/Hdws. C46 - Rd. Equiv. C.M. Pipe-Arch w/F.E.S. C47 - Rd. Equiv. C.M. Pipe-Arch w/Hdws. C48 - Rd. Equiv. Culv. Pipe w/F.E.S. C49 - Rd. Equiv. Culv. Pipe w/Hdws. C50 - Rd. Equiv. R.C. Pipe-Arch w/F.E.S. C51 - Rd. Equiv. R.C. Pipe-Arch w/Hdws. C52 - Conc. Box Culv.

SECTION C2 CULVERT NOTES

SHEET NO. 2-C2

CULVERT NOTES LIST

- C01 - Build R.C.P. w/F.E.S.'s
- C02 - Build R.C.P. w/F.E.S. on Inlet & Outlet in Conc. Box. Culv.
- C03 - R.C.P. - Remove Headwalls, Build Concrete F.E.S.'s
- C04 - Build R.C.P. - Class "-" Bedding w/Concrete F.E.S.'s
- C05 - Build R.C.P (Includes Jacked R.C.P.)
- C06 - Build Jacked R.C.P.
- C07 - Build R.C.P. As Median Structure
- C08 - Remove Bridge and Build R.C.P.
- C09 - Build Round Equivalent R.C.P.
- C10 - Build R.C.P. w/F.E.S. on Inlet & Outlet in Conc. Box Culv.
- C11 - Extend R.C.P. & Build Concrete F.E.S.
- C12 - C.M. Pipe w/Hdwls. - Remove Headwalls & Extend
- C13 - Build C.M. Pipe w/Headwall on Inlet & Overhang on Outlet
- C14 - Build C.M. Pipe w/Headwall on Inlet & Splash Basin on Outlet
- C15 - Remove C.M. Pipe w/Drop Inlet
- C16 - Build Round Equivalent
- C17 - C.M. Pipe - Remove and Install Flared End Sections
- C18 - Rd. Equiv. Pipe - Remove Headwall and Extend
- C19 - C.M. Pipe w/Hdwls. - Remove Hdwls. & Build F.E.S.
- C20 - Build Culvert Pipe & Hdwls.
- C21 - Build Twin Culvert Pipe w/F.E.S.
- C22 - Build Twin Culvert Pipe on Skew
- C23 - Remove R.C.P. and Build Culvert Pipe
- C24 - Build Culvert Pipe w/F.E.S.'s. & Bar Grate on Inlet
- C25 - (Salvage) Remove & Relay C.M. Pipe & Build Conc. Pipe w/F.E.S.'s
- C26 - Remove C.M. Pipe & Build Conc. Box Culv.
- C27 - Conc. Box Culv. - Remove Endwalls & Extend
- C28 - Concrete Box Culvert - Remove Endwalls & Extend
- C29 - Conc. Box Culv. - Plug Ends and Abandon
- C30 - Conc. Box Culv. - Sandfill
- C31 - Build Conc. Box Culv.
- C32 - Conc. Box Culv. - Remove Endwalls & Extend
- C33 - Build Concrete Box Culvert w/C.M.P. Stubout
- C34 - Build C.M. Pipe w/Metal F.E.S. on Inlet and Outlet in Stubout
- C35 - Build R.C.P. w/Conc. F.E.S.'s & Build R.C.P. Stubout
- C36 - Build R.C.P. for Median Structure w/Conc. F.E.S. & Outlet in Stubout
- C37 - Build R.C.P. as Irrigation Structure
- C38 - Build Steel Irrigation Structure (Permit No.)
- C39 - Original Design/Alternate Design Conc. Box Culv.
- C40 - C.M. Pipe w/Hdwls.
- C41 - C.M. Pipe w/F.E.S.
- C42 - C.M. Pipe w/Drop Inlet
- C43 - R.C.P. w/Hdwls.
- C44 - R.C.P. w/F.E.S.
- C45 - B.B. R.C.P. w/Hdwls.
- C46 - Rd. Equiv. C.M. Pipe-Arch w/F.E.S.
- C47 - Rd. Equiv. C.M. Pipe-Arch w/Hdwls.
- C48 - Rd. Equiv. Culv. Pipe w/F.E.S.
- C49 - Rd. Equiv. Culv. Pipe w/Hdwls.
- C50 - Rd. Equiv. R.C. Pipe-Arch w/F.E.S.
- C51 - Rd. Equiv. R.C. Pipe-Arch w/Hdwls.
- C52 - Concrete Box Culvert

SECTION C2 CULVERT NOTES

SHEET NO. 3-C2

GENERAL INFORMATION

Examples of notes for Pipe-Arch or Elliptical Pipes.

CORRUGATED METAL PIPE

DESIGN

Sta.*
Build 48" x 72' Round Equivalent
C.M. Pipe-Arch Culvert with Metal
Flared End Sections. Plan 410-R_
Exc.* Cu.Yds.

PRELIM

STA.*
48" x 72' RD. EQUIV. C.M. PIPE-ARCH
W/F. E. S.

CONCRETE PIPE

Sta.*
Build 48" x 72' Round Equivalent
Reinf. Concrete Elliptical Pipe with Conc.
Flared End Sections. Plan 410-R_
Exc.* Cu.Yds.

STA.*
48" x 72' RD. EQUIV. REINF. CONC.
ELLIPTICAL PIPE W/F. E. S.

Sta.*
Build 48" x 72' Round Equivalent
Reinf. Concrete Pipe-Arch with Conc.
Flared End Sections. Plan 410-R_
Exc.* Cu.Yds.

STA.*
48" x 72' RD. EQUIV. REINF. CONC.
PIPE-ARCH W/F. E. S.

CULVERT PIPE (OPTIONAL)

Sta.*
Build 48" x 72' Round Equivalent
Culvert Pipe with Flared End Sections.
Plan 410-R_. Exc.* Cu.Yds.

STA.*
48" x 72' RD. EQUIV. CULV. PIPE
W/F. E. S.

*This chart allows you to convert "SPAN x RISE" to the Round Equivalent dimension
(This applies to the Prelim. as well as the Design Notes)*

FORMULA: a.) Subtract rise from span. b.) Divide by 2. c.) Add to rise to obtain the equivalent diameter.

TABLE

Pipe-Arch Specification Requirements
Pipe-Arches---2 2/3 by 1/2 In. Corrugations

Pipe-Arch Size In.	Equiv. Dia. In.	Span ¹ In.	Rise ¹ In.	Min. Corner Radius In.	Max. B ² In.
17x13	15	17	13	3	5 1/4
21x15	18	21	15	3	6
24x18	21	24	18	3	7 1/4
28x20	24	28	20	3	8
35x24	30	35	24	3	9 1/2
42x29	36	42	29	3 1/2	10 1/2
49x33	42	49	33	4	11 1/2
57x38	48	57	38	5	13 1/2
64x43	54	64	43	6	15
71x47	60	71	47	7	16 1/2
77x52	66	77	52	8	18
83x57	72	83	57	9	20

¹ Allowable tolerance of + or - 1", or 2% of equivalent circular dia., whichever is greater.

² B² is defined as the vertical dimension from a horiz. line across the widest portion of the arch to the lowest portion of the base.

All dimensions are measured from the inside crests of the corrugations.

SECTION C2 CULVERT NOTES

SHEET NO. 4C2

GENERAL INFORMATION

SURVEY/PLAN ACCURACY FOR DRAINAGE PIPES:

*Stationing - Nearest Foot
Length of Pipe - Nearest Foot
Skew Angle - Nearest Degree
Elbows - Nearest Degree
Collar w/_° Bend - Nearest Degree*

Construction Notes:

*Use Upper and Lower Case letters. Spell out all of the words when possible.
(Exceptions include: Lt., Rt., Conc. Collar, Conn. Band, Cu. Yds., Sq. Yds., Lin. Ft.)*

Preliminary Notes:

*Use all Upper Case letters.
Okay to abbreviate.*

PRELIMINARY PIPE NOTE ABBREVIATIONS	
WORD	ABBREVIATION
STATION	STA.
LEFT	LT.
RIGHT	RT.
CONCRETE	CONC.
CONNECTING	CONN.
CORRUGATED METAL	C.M.
DRIVEWAY	DRIVE (PREFERRED) OR DR.
HEADWALLS	HDWLS.
FIELD ENTRANCE	F.E.
FLARED END SECTION(S)	F.E.S.
REINFORCED	REINF.
BROKEN BACK	B.B.
DOUBLE BROKEN BACK	DBL. B.B.
EQUIVALENT	EQUIV.
CULVERT	CULV.
ROADWAY	RDWY.
BRIDGE	BR.
WITH	W/
MANHOLE	M.H.

SECTION C2 CULVERT NOTES

SHEET NO. 5-C2

INFORMATION ONLY

CELL NAME

CONCRETE PIPE

NOTE: Q_{__}, D.A. and H.W. required on all crossroad culvert construction notes.

- Q_{__} - Design Discharge (c.f.s.)
Subscript indicates storm frequency used.
- D.A. - Drainage Area in Acres.
- H.W. - Design Headwater, depth of flow measured from the flow line of the inlet.

If drainage information cannot be determined, the following note should be used:
Design Discharge (Q) and Drainage Area (D.A.) cannot be determined by office means unless otherwise noted on the plans.

Pay quantity for new pipe, extends to center of intersecting pipe, M.H. or Inlet, etc.

Elbows for a C.M. Pipe do not require Plan 425-R_{..}.

NOTE:
Broken back reference will NOT be made on new pipes.

- B.B. - Broken Back
- DBL. B.B. - Double Broken Back

A bend on a concrete pipe can be either Vertical or Horizontal. However, DO NOT specify Horizontal or Vertical when calling for an elbow or a collar with a bend on preliminary pipe notes.

Always abbreviate Concrete Collars as Conc. Collars.

Class IV or Class V Pipe may be required in areas of excessive fill or under R.R. tracks.
Bedding Sketch is required on Culvert X-Sec.

REQUIRED PIPE LENGTHS UNDER R.R. TRACKS
(Jacking may be required)
⊕ R.R. to end of pipe - 15' Minor Tracks
⊕ R.R. to end of Pipe - 25' Major Tracks

NEW PIPES - Space dictates whether the note should say "with" or "w/" Flared End Section(s)
EXTEND PIPE - Note should say "Build" Flared End Section(s)

Safety Sloped End Sections (Special Plan 4120 1) can be used in lieu of Flared End Sections.

NOTE:
DO NOT call out the type of material for Flared End Sections ANYWHERE on the project.
DO call out the type of pipe on the "Horse Blanket".

C01 Sta. ___+___
D.A.=__Ac., Q_{__}=__cfs, H.W.=__'
Build __" x ___' Reinforced
Concrete Pipe with Concrete
Flared End Sections.
Plan 410-R_{..}.
Exc.=__ Cu. Yds.

C02 Sta. ___+___
D.A.=__Ac., Q_{__}=__cfs, H.W.=__'
Build __" x ___' Reinforced
Concrete Pipe with Concrete
Flared End Section on Inlet
& Outlet in Concrete Box
Culvert. Plan 410-R_{..}.
___° Elbow. Plan 425-R_{..}.
Exc.=__ Cu. Yds.

C03 STA. ___+___
___" x ___' B.B. REINF. CONC. PIPE
W/HDWLS.
D.A.=__Ac., Q_{__}=__cfs, H.W.=__'
Remove Headwalls. Extend
___' Lt. & ___' Rt. Build
Concrete Flared End Sections.
Plan 410-R_{..}. 2-Conc. Collars
with ___° Bend. Plan 425-R_{..}.
Exc.=__ Cu. Yds.

C04 Sta. ___+___
D.A.=__Ac., Q_{__}=__cfs, H.W.=__'
Build __" x ___' Reinforced
Concrete Pipe, Class __,
Class "___" Bedding w/Concrete
Flared End Sections.
Plan 410-R_{..}.
Exc.=__ Cu. Yds.

SECTION C2 CULVERT NOTES

SHEET NO. 6-C2

INFORMATION ONLY

CELL NAME

CONCRETE PIPE

Length of Pipe Partially Jacked.

Class IV or Class V Pipe may be required in areas of excessive fill or under Railroad Tracks.

*Full Length of Pipe Jacked.
If R.C.P. Class -- is to be Jacked, it must be stated in the note.*

No Excavation Quantity is required for Median Structures in new embankment.

If you remove pipe from an 'Existing' Median Structure you need to pay for excavation.

Excavation & Concrete Collars are NOT to be paid for when only installing new Flared End Sections directly on existing pipes.

If a Headwall Type is required, please note after the word Headwalls.

C05 Sta. ___+___
Build ___" x ___' Reinforced Concrete Pipe (Includes ___' Jacked R.C.P. Class ___).
Exc.=___ Cu. Yds.

C06 Sta. ___+___
Build ___" x ___' Jacked Reinforced Concrete Pipe, Class ___. Exc.=___ Cu. Yds.

C07 Sta. ___+___
Build ___" x ___' Reinforced Concrete Pipe as Median Structure w/Concrete Flared End Sections. Plan 410-R_.

C08 STA. ___+___
-----' SPAN TIMBER BR. WD. FLOOR, W/___' CLEAR RDWY.
D.A.=___Ac., Q =___cfs, H.W.=___'
Remove & Build ___" x ___' Reinforced Concrete Pipe & Headwalls. Special Plan _C. ___° Elbow. Plan 425-R_.
Exc.=___ Cu. Yds.

C09 Sta. ___+___
D.A.=___Ac., Q =___cfs, H.W.=___'
Build ___" x ___' Round Equivalent Reinforced Conc. Pipe and Headwalls. Special Plan _C. Exc.=___ Cu. Yds.

SECTION C2 CULVERT NOTES

SHEET NO. 7-C2

INFORMATION ONLY

CELL NAME

CONCRETE PIPE

C10 Sta. ___+___
 D.A.=__Ac., Q__ =__cfs, H.W.=__'
 Build __" x __' Reinforced
 Concrete Pipe with Concrete
 Flared End Section on Inlet
 & Outlet in Concrete Box
 Culvert. Plan 410-R_, ___°
 Elbow. Plan 425-R_, -Tap.
 Plan 428-R_.
 Exc.=__ Cu. Yds.

*Only pay for a tap if tapping into an existing Inlet,
 Culvert or Box Culvert.*

C11 STA. ___+___
 __" x __' REINF. CONC. PIPE
 W/HDWLS.
 D.A.=__Ac., Q__ =__cfs, H.W.=__'
 Remove Headwall & Extend
 __' Rt. Build Concrete Flared
 End Section on Rt.
 1-Conc. Collar. Plans 425-R_
 & 410-R_.
 Exc.=__ Cu. Yds.

When you are connecting to another pipe.

*Always abbreviate Concrete Collars as Conc. Collars.
 Always abbreviate Connecting Bands as Conn. Bands.*

CORRUGATED METAL PIPE

C12 STA. ___+___
 __" x __' C.M. PIPE W/HDWLS.
 D.A.=__Ac., Q__ =__cfs, H.W.=__'
 Remove Headwalls & Extend
 __' Lt. & __' Rt. Build Metal
 Flared End Sections.
 Plan 410-R_. ___° Elbow,
 -Conn. Bands. (Temporary:
 Includes __' C.M. Pipe &
 ___° Elbow).
 Exc.=__ Cu. Yds.

*If you are phasing the construction of a drainage
 structure, handle on the drainage cross sections, with
 dimensions, stating Phase 1, Phase 2.
 DO NOT phase the construction notes in the plans.*

*Show the dimension for final pipe size. Removing temporary
 pipe and reinstalling the Flared End Section is covered in
 the Special Provisions.*

*If you are building a 'Drop Structure' DO NOT specify
 that in the note. The cross sections will indicate what
 is happening.*

*NEW PIPES - Space dictates whether the note should say
 "with" or "w/" Flared End Section(s)
 EXTEND PIPE - Note should say "Build" Flared End Section(s)*

*Safety Sloped End Sections (Special Plan 4120 1) can be
 used in lieu of Flared End Sections.*

SECTION C2 CULVERT NOTES

SHEET NO. 8-C2

INFORMATION ONLY

CELL NAME

CORRUGATED METAL PIPE

- C13 Sta. ___+__
 D.A.=__Ac.,Q =__cfs,H.W.=__'
 Build __" x __' Corrugated
 Metal Pipe with Headwall on
 Inlet & Overhang on Outlet.
 Special Plan _C.
 Exc.=__ Cu. Yds.
- C14 Sta. ___+__
 D.A.=__Ac.,Q =__cfs,H.W.=__'
 Build __" x __' Corrugated
 Metal Pipe with Headwall on
 Inlet. Special Plan _C.
 ___° Elbow & Splash Basin
 on Outlet, as Shown by
 Sketch on Sheet 2-N.
 Exc.=__ Cu. Yds.
- C15 STA. ___+__
 __" x __' C.M. PIPE W/DROP
 INLET. Remove.
- C16 Sta. ___+__
 D.A.=__Ac.,Q =__cfs,H.W.=__'
 Build __" x ___' Round
 Equivalent Corrugated Metal
 Pipe-Arch Culvert &
 Headwalls. Special Plan _C.
 Exc.=__ Cu. Yds.

SECTION C2 CULVERT NOTES

SHEET NO. 9-C2

INFORMATION ONLY

CELL NAME

CORRUGATED METAL PIPE

DO NOT specify the type of material when "Reinstalling" a Flared End Section.

If extending Rd. Equiv. pipe, call for Special Conc. Collars, regardless of pipe material.

Safety Sloped End Sections (Special Plan 4120 1) can be used in lieu of Flared End Sections.

DO NOT remove 2 ft. of pipe unless the existing pipe end is mitered.

C17 STA. ___+___
 ___" x ___' C.M. PIPE W/F.E.S.
 Remove Flared End Sections &
 Extend ___' Lt. & ___' Rt.
 Reinstall Flared End Sections.
 _-Conn. Bands.
 Exc.=___ Cu. Yds.

C18 STA. ___+___
 ___" x ___' RD. EQUIV. C.M. PIPE-
 ARCH W/HDWLS.
 Remove Headwalls & Extend
 ___' Lt. & ___' Rt. Build Metal
 Flared End Sections.
 Plan 410-R_. _-Conc. Collars.
 Plan 425-R_.
 Exc.=___ Cu. Yds.

C19 STA. ___+___
 ___" x ___' C.M. PIPE W/HDWLS.
 Remove Headwalls & Extend
 ___' Lt. & ___' Rt. Build Metal
 Flared End Sections.
 Plan 410-R_. _-Conn. Bands.
 Exc.=___ Cu. Yds.

OPTIONAL PIPE

If the Headwall Special Plan allows for the construction of different types of Headwalls, the type must be addressed in the note.

C20 Sta. ___+___
 D.A.=___Ac., Q =___cfs, H.W.=___'
 Build ___" x ___' Culvert Pipe
 & Headwalls. Special Plan _C.
 Exc.=___ Cu. Yds.

Multiple Pipes having Flared End Sections require a sketch showing the dimensions between the pipes. (Usually on drainage cross-sections).

C21 Sta. ___+___
 D.A.=___Ac., Q =___cfs, H.W.=___'
 Build Twin ___" x ___' Culvert
 Pipe w/Flared End Sections.
 Plan 410-R_.
 Exc.=___ Cu. Yds.

SECTION C2 CULVERT NOTES

SHEET NO. 10-C2

INFORMATION ONLY

CELL NAME

OPTIONAL PIPE

*WHEN DESCRIBING MULTIPLE PIPES:
Use the 'word' for the number of pipes,
NOT the number. (i.e. Twin, Triple, etc.)*

C22 Sta. ___+___
D.A.=__Ac., Q __ =__cfs, H.W.=__'
Build Twin __" x __' Culvert
Pipe on __° Skew &
Headwalls. Special Plan _C.
Exc.=__ Cu. Yds.

C23 STA. ___+___
__" x ___' REINF. CONC. PIPE
W/HDWLS.
D.A.=__Ac., Q __ =__Cfs, H.W.=__'
Remove & Build __" x __'
Culvert Pipe with Flared End
Sections. Plan 410-R_.
Exc.=__ Cu. Yds.

*Standard Plan 413-R_ (Bar Grate for Flared End Sections)
is located in the Standard/Special Plan Book.*

C24 Sta. ___+___
D.A.=__Ac., Q __ =__cfs, H.W.=__'
Build __" x ___' Culvert Pipe
with Flared End Sections
& Build Bar Grate on Inlet.
Plan 410-R_ & 413-R_.
Exc.=__ Cu. Yds.

*Safety Sloped End Sections (Special Plan 4120 1) can be
used in lieu of Flared End Sections.*

*If a ROADWAY PIPE is going to be removed and reused, or
sent to the Maintenance Yard for future use, we should
call for (Salvage) in the note.*

C25 STA. ___+___ LT.
__" x ___' C.M. PIPE
D.A.=__Ac., Q __ =__cfs, H.W.=__'
(Salvage). Remove & Relay at
Sta. ___+___.
Build __" x ___' Concrete
Pipe with Flared End Sections.
Plan 410-R_.
Exc.=__ Cu.Yds

*If pipe is to be reused at a new location, the note should
state "Relay __" x __' Pipe from Sta. ___+___."*

*You DO NOT need to specify (Salvage) for DRIVEWAY PIPES,
even if pipe is to be kept.*

SECTION C2 CULVERT NOTES

SHEET NO. I-C2

INFORMATION ONLY

CELL NAME

CONCRETE BOX CULVERTS

SURVEY/PLAN ACCURACY FOR DRAINAGE BOX CULVERTS:

- Stationing - Nearest Foot
- Height & Width of Box - As Surveyed
- Length of Box - As Surveyed
- Skew Angle - Nearest Degree

A Box culvert will need a structure number when the span exceeds 20'.

BOX CULVERTS with Bends or Breaks:

- Bends are horizontal
- Breaks are vertical.

You DO NOT have to call out the ° of Bend or Break on preliminary culvert notes.

When describing a Box Culvert in the Preliminary Pipe Note, ALWAYS use the term "Wingwalls" regardless if the wingwalls are straight or flared. Keep in mind that not all Box Culverts have wingwalls. Some are just Box Culverts. A Box Culvert will NEVER have Headwalls. Likewise a Culvert Pipe will NEVER have Wingwalls.

When removing these walls, use the term "Endwalls".

Example:

"Remove Endwalls & 2' of Barrel."

The term ENDWALLS in this case applies to straight wall, wingwalls and the parapet.

(All walls at the end of the Box Culvert)

If only removing Endwalls & 2' of Barrel on one side, the note should read:

"Remove Endwalls on Rt. (or Lt.) & 2' of Barrel."

If a Box Culvert requires a Concrete Apron, you do not need to call it out in the Construction Note. The Special Plan will show how the Box Culvert is to be built.

Note C29:

If the size of the Barrel(s) is not covered in the chart that is located on Standard Plan 428-R, you will need to have a Special Plan made up by the Bridge Dept.

Note C30:

If a Sandfill Sketch is to be shown on the Drainage X-Sections, label subsidiary. You do not need to refer to the Sketch in the note.

If there is not room for the Sandfill Sketch on the drainage X-Sections, the sketch may be placed on the 2-N Sheet, but it must be noted 'See Sketch on Sheet 2-N'.

Sandfill note example:

Remove Endwalls.
Sandfill __ Cu. Yds.
Plug Ends and Abandon.
Plan 428-R.

C26 STA. ___+___
___' x ___' C.M. PIPE W/HDWLS.
D.A.=__Ac., Q __ =__ cfs, H.W.=__'
Remove. Build ___' x ___'
x ___' Concrete Box Culvert
on __° Skew. Plan __.
__- Control Joints.
Plan 404-R. Fill=__'.
Exc.=__ Cu. Yds.

C27 STA. ___+___ # (S_____)
TWIN ___' x ___' x ___' CONC. BOX
CULV. ON __° SKEW W/WINGWALLS.
D.A.=__Ac., Q __ =__ cfs, H.W.=__'
Remove Endwalls & ___' of
Barrel. Extend ___' Lt. &
___' Rt. ___° Bend.
Plans ___ & 403-R.
Fill=__'. Exc.=__ Cu. Yds.

C28 STA. ___+___ # (S_____)
TWIN ___' x ___' x ___' CONC. BOX
CULV. ON __° SKEW W/WINGWALLS.
D.A.=__Ac., Q __ =__ cfs, H.W.=__'
Remove Endwalls & ___' of
Barrel. Extend ___' Lt.
___° Bend. Plans ___ &
403-R. Fill=__'.
Exc.=__ Cu. Yds.

NO SANDFILL

C29 STA. ___+___ # (S_____)
___' x ___' x ___' CONC. BOX CULV.
Plug Ends & Abandon.
Plan 428-R.

SANDFILL

C30 STA. ___+___ # (S_____)
___' x ___' x ___' CONC. BOX CULV.
Plug Ends & Sandfill.

SECTION C2 CULVERT NOTES

SHEET NO. 12-C2

INFORMATION ONLY

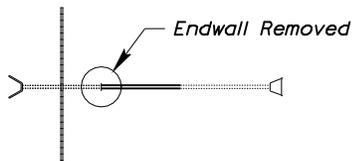
CELL NAME

CONCRETE BOX CULVERTS

Example of a Railroad Structure to a Roadway Structure:

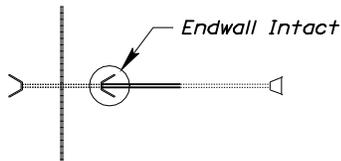
This note should be boxed & leadered.

STA. ___+__: -' LT.
 __' x __' x ___' CONC. RR BOX CULV.
 W/ENDWALLS.
 Remove Endwalls.



*This note should NOT be boxed & leadered.
 If you do NOT remove the endwalls, but will be doweling
 the Highway structure to the Railroad structure.*

STA. ___+__: -' LT.
 __' x __' x ___' CONC. RR BOX CULV.
 W/ENDWALLS.



*Make no deduction for concrete in Box Culverts
 where stubouts are built.*

C31 Sta. ___+__
 D.A.=__Ac., Q __ cfs, H.W.=__'
 Build __' x __' x __'
 Concrete Box Culvert.
 Plan ____. Fill=__'.
 Exc.=__ Cu. Yds.

C32 STA. ___+__ #(S_____)
 __' x __' x ___' CONC. BOX CULV.
 D.A.=__Ac., Q __ cfs, H.W.=__'
 Remove Endwalls & __' of
 Barrel. Extend __' Lt. &
 __' Rt. Plan __ &
 Special Plan _C. Fill= __'.
 Exc.=__ Cu. Yds.

STUBOUT PIPES

C33 Sta. ___+__
 D.A.=__Ac., Q __ cfs, H.W.=__'
 Build __' x __' x __'
 Concrete Box Culvert with
 __" x __' Corrugated Metal
 Pipe Stubout. Plan ____.
 Fill=__'. Exc.=__ Cu. Yds.

C34 Sta. ___+__ Lt. to
 Sta. ___+__ Lt.
 Build __" x ___' Corrugated
 Metal Pipe with Metal Flared
 End Section on Inlet & Outlet
 in Stubout. Plan 410-R_.
 ___° Elbow. --Conn. Bands.
 Exc.=__ Cu. Yds.

SECTION C2 CULVERT NOTES

SHEET NO. 13-C2

INFORMATION ONLY

CELL NAME

STUBOUT PIPES

C35 Sta. ___+___
D.A.=__Ac., Q =__cfs, H.W.=__'
Build __" x __' Reinforced
Concrete Pipe with Concrete
Flared End Sections.
Plan 410-R_ & Build __" x __'
Reinforced Concrete Pipe
Stubout. Exc.=__ Cu. Yds.

C36 Sta. ___+___
Build __" x ___' Reinforced
Concrete Pipe for Median
Structure w/Conc. Flared End
Section & Build Bar Grate on
Inlet. Outlet in Stubout.
Plan 410-R_ & 413-R_.

MISCELLANEOUS STRUCTURES

C37 Sta. ___+___
Build __" x __' Reinforced
Concrete Pipe as Irrigation
Structure on __° Skew
w/Siphon Headwalls. Plan 414
& Special Plan __C.
Exc.=__ Cu. Yds.

C38 Sta. ___+___ (Permit No. __)
Build __" x __' Steel
Irrigation Structure with
__" x __' Steel Casting.
_--° Elbow & --Coupling
Connectors.
Exc.=__ Cu. Yds.

If it is an Irrigation Pipe it needs to be
stated in the note.

(Permit No. __) Refer to permit issued by
Maintenance Division.

SECTION C2 CULVERT NOTES

SHEET NO. 14-C2

INFORMATION ONLY

CELL NAME

**MISCELLANEOUS STRUCTURES
(ALTERNATE DESIGN NOTE)**

C39

Sta. ___+__
 D.A.=__Ac., Q__=__cfs, H.W.=__'
ORIGINAL DESIGN:
 Build __' x __' x __' Conc.
 Box Culvert. Special Plan _C.
 Fill=__'. Exc.=__ Cu. Yds.
ALTERNATE DESIGN:
 Build __' x __' x __' Precast
 Concrete Box Culvert w/Conc.
 End Sections.
 Special Plan _C & _C. Fill=__'.
 Exc.=__ Cu. Yds.

Sometimes Bridge Dept. will make their Std. Plan into a Special Plan. CHECK IT OUT.

If you use a Poured-in-Place End Section, specify the appropriate Standard Plan. If either a Poured-in-Place or a Precast End Section will do, Specify both plan numbers.

SECTION C2 CULVERT NOTES

SHEET NO. 15-C2

INFORMATION ONLY

CELL NAME

*Examples of PRELIMINARY PIPE NOTES
(See Section "J" for Existing Bridge note examples)*

*Preliminary Pipe Notes use all Capital letters.
CO = 4
WT = 1
TX = 10 (100 scale)*

If a pipe is a B.B. (Broken Back) or a DBL. B.B. (Double Broken Back), you DO NOT have to call out the ° of Elbow(s) on preliminary pipe notes.

*When describing a pipe under a driveway, we need to say that it is a "DR. PIPE".
If we know the type of material, we need to say it in the note. (i.e. C.M. DR. PIPE or CONC. DR. PIPE)
If the material is unknown, the note should say "DR. PIPE".
Refer to note cell E02 or E05 for a "C.M. DR. PIPE".*

See Sheet No. 4-C2 for Preliminary Pipe Note abbreviations.

These Preliminary Pipe Note Cells are starting points for the notes. They may need to be modified to fit the actual situation. The following are some examples of modified notes:

STA. 123+45
24" x 60' REINF. CONC. PIPE
W/INLET IN CURB INLET &
HDWL. ON OUTLET

STA. 123+45
24" x 60' REINF. CONC. PIPE
W/INLET & OULET IN CURB INLET

STA. 123+45
24" x 60' REINF. CONC. PIPE
W/INLET IN CURB INLET &
F.E.S. ON OUTLET

STA. 123+45
24" x 60' REINF. CONC. PIPE
W/INLET IN CURB INLET &
OUTLET IN MANHOLE

STA. 123+45
24" x 60' REINF. CONC. PIPE
W/INLET & OUTLET IN MANHOLE

STA. 123+45
24" x 60' REINF. CONC. PIPE
W/HDWL. ON INLET &
F.E.S. ON OUTLET

C40 STA. ___+___
___" x ___' C.M. PIPE W/HDWLS.

C41 STA. ___+___
___" x ___' C.M. PIPE W/F.E.S.

C42 STA. ___+___
___" x ___' C.M. PIPE W/DROP INLET

C43 STA. ___+___
___" x ___' REINF. CONC. PIPE
W/HDWLS.

C44 STA. ___+___
___" x ___' REINF. CONC. PIPE
W/F.E.S.

C45 STA. ___+___
___" x ___' B.B. REINF. CONC. PIPE
W/HDWLS.

C46 STA. ___+___
___" x ___' RD. EQUIV. C.M. PIPE-
ARCH W/F.E.S.

C47 STA. ___+___
___" x ___' RD. EQUIV. C.M. PIPE-
ARCH W/HDWLS.

C48 STA. ___+___
___" x ___' RD. EQUIV. CULV. PIPE
W/F.E.S.

C49 STA. ___+___
___" x ___' RD. EQUIV. CULV. PIPE
W/HDWLS.

C50 STA. ___+___
___" x ___' RD. EQUIV. REINF.
CONC. PIPE-ARCH W/F.E.S.

C51 STA. ___+___
___" x ___' RD. EQUIV. REINF.
CONC. PIPE-ARCH W/HDWLS.

C52 STA. ___+___
___' x ___' x ___' CONC. BOX CULV.

SECTION D CONCRETE NOTES

SHEET NO. 1-D

CONCRETE NOTES SHEET INDEX

SHEET 1-D	CONCRETE NOTES SHEET INDEX
SHEET 2-D	CONCRETE NOTES LIST
SHEET 3-D	D01 - Build Pavement Approach Slab Type "-" D02 - Build Pavement Approach Slab D03 - Build Concrete Flume Type "-" D04 - Build Concrete Flume Type "-" w/C.M.P. D05 - Remove and Build Concrete Drive D06 - Build Concrete Drive D07 - Drop Curb for Driveway
SHEET 4-D	D08 - Build Concrete Terrace Steps D09 - Build Reinforced Concrete Steps D10 - Build Concrete Retaining Wall D11 - Build MSE Wall D12 - Build Concrete Ditch Lining D13 - Build Concrete Island Nose D14 - Remove Pavement and Build Concrete Island Nose
SHEET 5-D	D15 - Build Concrete Median Surfacing D16 - Remove and Build Concrete Sidewalk D17 - Build Curb Ramp D18 - Build Concrete Curb, Type "-" D19 - Build Concrete Median Curb D20 - Build Concrete Barrier Curb D21 - Build Combination Concrete Curb and Gutter
SHEET 6-D	D22 - Build Concrete Base Course D23 - Build Concrete Pavement Repair D24 - Build Asphalt Patching of Concrete Pavement D25 - Build Pavement Repair D26 - Build Concrete Pavement D27 - Build Dowelled Concrete Pavement

SECTION D CONCRETE NOTES

SHEET NO. 2-D

SECTION D

CONCRETE NOTES LIST

- D01 - Build Pavement Approach Slab Type "-"
- D02 - Build Pavement Approach Slab
- D03 - Build Concrete Flume Type "-"
- D04 - Build Concrete Flume Type "-" w/C.M.P.
- D05 - Remove and Build Concrete Drive
- D06 - Build Concrete Drive
- D07 - Drop Curb for Driveway
- D08 - Build Concrete Terrace Steps
- D09 - Build Reinforced Concrete Steps
- D10 - Build Concrete Retaining Wall
- D11 - Build MSE Wall
- D12 - Build Concrete Ditch Lining
- D13 - Build Concrete Island Nose
- D14 - Remove Pavement and Build Concrete Island Nose
- D15 - Build Concrete Median Surfacing
- D16 - Remove and Build Concrete Sidewalk
- D17 - Build Curb Ramp
- D18 - Build Concrete Curb, Type "-"
- D19 - Build Concrete Median Curb
- D20 - Build Concrete Barrier Curb
- D21 - Build Combination Concrete Curb and Gutter
- D22 - Build Concrete Base Course
- D23 - Build Concrete Pavement Repair
- D24 - Build Asphalt Patching of Concrete Pavement
- D25 - Build Pavement Repair
- D26 - Build Concrete Pavement
- D27 - Build Dowelled Concrete Pavement

SECTION D CONCRETE NOTES

SHEET NO. 3-D

INFORMATION ONLY

CELL NAME

*One note needed at each end of Bridge (or as required).
One note cannot cover both slabs.*

*The note may call out for a type of Bridge Approach
Section if more than one type is detailed on the plan.*

*The Bridge Approach Slabs may be part of the bridge plan,
however you still need the Pavement Approach Slab note
for each end of the bridge.
Special Plan or Special Plan C to match Bridge
Naming conventions.*

*There are 7-Types of Flume Special Plans that are approved.
Flume Types IV, V, VI, VII & VIII are 2-sheet plans.
The second sheet is similar to an Area Inlet. Although Flume
Types IV, V, VII & VIII show Elbows on the Special Plan, they
are not called for in the construction note. They should be
shown in Comp's. and also on Cross Sections, if applicable.
(FLUME TYPE III HAS BEEN VOIDED)*

FLUME TYPE	SPECIAL PLAN NUMBER
I	4341-1
II	4342-1
IV	4344-1
V	4345-1
VI	4346-1
VII	4347-1
VIII	4348-1

For reference only.

Note D05 use for Urban Drives only

For Urban jobs show normal driveway geometrics on plans.

*Note D07 is used at driveway locations when building
Combination Curb & Gutter in front of the driveway.
Stationing for Combination Concrete Curb & Gutter can
continue through driveway locations.*

D01 Sta. ___+__ to
Sta. ___+__
Build Pavement Approach Slab
Type __, (___' Wide).
Special Plan _C.

D02 Sta. ___+__ to
Sta. ___+__
Build Pavement Approach Slab.
Special Plan _C.

D03 Sta. ___+__ Lt.
Build Concrete Flume, Type __.
L=___'. Special Plan _C.

D04 Sta. ___+__ Lt.
Build Concrete Flume, Type _
w/___" x ___' Corrugated
Metal Pipe. Special Plan _C.

D05 Sta. ___+__ Lt.
Remove __ Sq. Yds. of
Driveway & Build __ Sq. Yds.
of Concrete Drive.
Plan 301-R_.

D06 Sta. ___+__ Lt.
Build __ Sq. Yds. of
Concrete Drive. Plan 301-R_.

D07 Sta. ___+__ to
Sta. ___+__ Lt.
Drop Curb for Driveway.
Plan 301-R_.

SECTION D CONCRETE NOTES

SHEET NO. 4D

INFORMATION ONLY

CELL NAME

Excavation Subsidiary. Obtain plan from Bridge Dept.

D08 Sta. ___+__ Lt.
Build __' Concrete Terrace
Steps. __-Risers, __ Lin. Ft.
of Handrail. Special Plan _C.

Obtain plan from Bridge Dept.

D09 Sta. ___+__ Lt.
Build Reinforced Concrete
Steps. __' Wall, __-Risers,
__ Lin. Ft. of Handrail.
Special Plan _C.

() Define Level or Surcharge Surface.
Excavation is Subsidiary.
Obtain plan from See Bridge Dept.*

D10 Sta. ___+__ to
Sta. ___+__
Build __ Lin. Ft. of
__' Concrete Retaining Wall,
__ Surface. __-Entrance
Corners and __-Wall Corners.
Special Plan _C.

D11 Sta. ___+__ to
Sta. ___+__ Rt.
Build MSE Wall.
Special Plan _C.

*Remove 'Ditch Liner' by Sq. Yds.
Build 'Ditch Lining' by Lin. Ft.*

D12 Sta. ___+__
Build __ Lin. Ft. of Concrete
Ditch Lining with Type "__"
Inlet. Plan 455.

Nose integral and subsidiary with Concrete Pavement.

D13 Sta. ___+__ to
Sta. ___+__
Build __' Concrete Island
Nose. Plan 301-R_.

D14 Sta. ___+__ to
Sta. ___+__
Remove __ Sq. Yds. of
Pavement & Build Concrete
Island Nose. Plan 301-R_.

SECTION D CONCRETE NOTES

SHEET NO. 5-D

INFORMATION ONLY

CELL NAME

Do not specify type of material when removing walk.

State the width of the New Sidewalk in the note.

*Curb Ramps are subsidiary to 'SIDEWALK CONSTRUCTION'
Curb Ramp Areas (Sq. Yds.) included in Sidewalk quantity.*

*When new Conc. Pavement is placed adjacent to
existing concrete, it is necessary to install Tie Bars.*

*It is NOT necessary to show the Tie Bars in
plan view. (Sheet 2-T is sufficient).*

DO NOT place 'INSTALL TIE BAR' note on the plans.

*But, you DO have to submit a Tie Bar summary of
quantities for the 2-S Sheet.*

*COMBINATION CONCRETE CURB & GUTTER
Min. width = 2'-0", Max. width = 3'-6"
NO joints. . . NO steel. . . NO subgrade Prep.*

D15 Sta. ___+__ to
Sta. ___+__
Build __ Sq. Yds. of
Concrete Median Surfacing.
Plan 301-R_.

D16 Sta. ___+__ to
Sta. ___+__ Lt.
Remove __ Sq. Yds. of Walk &
Build __ Sq. Yds. of __'
Concrete Sidewalk.
Plan 301-R_.

D17 Sta. ___+__ Rt.
Build Curb Ramp, Type __.
Special Plan _C.

D18 Sta. ___+__ to
Sta. ___+__
Build __ Lin. Ft. of Concrete
Curb, Type __. Plan 301-R_.

D19 Sta. ___+__ to
Sta. ___+__
Build __ Lin. Ft. of Concrete
Median Curb. Plan 301-R_.

D20 Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Lin. Ft. of Concrete
Barrier Curb. Plan 301-R_.

D21 Sta. ___+__ to
Sta. ___+__ Rt.
Build __ Lin. Ft. of
__' Combination Concrete
Curb & Gutter. Plan 301-R_.

SECTION D CONCRETE NOTES

SHEET NO. 6-D

INFORMATION ONLY

CELL NAME

'CONCRETE BASE COURSE'

With curb. . .joints ARE required
 W/O curb. . .joints are NOT required.
 If built in more than 1-longitudinal pour, you must show
 the additional longitudinal joint and the Tie Bars on the
 2-T Sheet.

DO NOT call out widening in the note. Yes you may be
 widening the pavement, but the 'Pay Item' is Base Course.

D22 Sta. ___+__ to
 Sta. ___+__ Rt.
 Build __ Sq. Yds. of Conc.
 Base Course. Plan 301-R_.

FOR PATCHING CONCRETE WITH CONCRETE:

1-note for each lane of traffic.

2-5 Sq. Yds.= Type "A"
 6-15 Sq. Yds. = Type "B"
 over 15 Sq. Yds. = Type "C"

NOTE: A removal note is not needed (Subsidiary).

D23 Sta. ___+__
 Build __ Sq. Yds. of
 Concrete Pavement Patching,
 Type ___.

FOR PATCHING CONCRETE WITH ASPHALT:

1-note for each lane of traffic.

2-5 Sq. Yds.= Type "A"
 6-15 Sq. Yds. = Type "B"
 over 15 Sq. Yds. = Type "C"

D24 Sta. ___+__
 Build __ Sq. Yds. of
 Pavement Repair.

FOR PATCHING ASPHALT WITH ASPHALT:

Paid for as Equipment Rental.

When you have this situation, a note is NOT
 needed on the plans. However, the 2-S Sheet
 will have a quantity for 'Asphaltic Concrete
 (or Bituminous) for Patching.'

D25 Sta. ___+__ to
 Sta. ___+__ Lt.
 Build __ Sq. Yds. of Asphalt
 Patching of Concrete
 Pavement, Type ___.

D26 Sta. ___+__ to
 Sta. ___+__
 Build __ Sq. Yds. of
 Concrete Pavement.
 See Sheet 2-T.

D27 Sta. ___+__ to
 Sta. ___+__
 Build __ Sq. Yds. of
 Dowelled Concrete Pavement.
 See Sheet 2-T.

SECTION E RURAL DRIVE AND INTERSECTIONS NOTES SHEET NO. 1-E

RURAL DRIVES & INTERSECTIONS NOTES SHEET INDEX

SHEET 1-E	RURAL DRIVES AND INTERSECTIONS NOTES SHEET INDEX
SHEET 2-E	RURAL DRIVES & INTERSECTIONS NOTES LIST
SHEET 3-E	E01 - Lay Driveway Pipe & Build Earth Drive E02 - Driveway Pipe - Remove, Relay & Extend & Build Earth Drive E03 - Build Earth Drive & Surface E04 - Build Earth Drive E05 - Remove & Relay C.M. Drive Pipe E06 - Relay C.M. Drive Pipe E07 - Surface 3-Way Intersection E08 - Surface 4-Way Intersection
SHEET 4-E	E09 - Surface Driveway E10 - Build 3-Way Intersection E11 - Build 4-Way Intersection E12 - Build __ Tons of Gravel Surface Course E13 - Build __ Cu. Yds. of Gravel Surface Course E14 - Build __Tons of Crushed Rock Surface Course E15 - Build __Cu. Yds. of Crushed Rock Surface Course

SECTION E RURAL DRIVE AND INTERSECTIONS NOTES

SHEET NO. 2-E

RURAL DRIVES & INTERSECTIONS NOTES LIST

- E01 - Lay Driveway Pipe & Build Earth Drive
- E02 - Driveway Pipe - Remove, Relay & Extend & Build Earth Drive
- E03 - Build Earth Drive & Surface
- E04 - Build Earth Drive
- E05 - Remove & Relay C.M. Drive Pipe
- E06 - Relay C.M. Drive Pipe
- E07 - Surface 3-Way Intersection
- E08 - Surface 4-Way Intersection
- E09 - Surface Driveway
- E10 - Build 3-Way Intersection
- E11 - Build 4-Way Intersection
- E12 - Build __ Tons of Gravel Surface Course
- E13 - Build __ Cu. Yds. of Gravel Surface Course
- E14 - Build __Tons of Crushed Rock Surface Course
- E15 - Build __Cu. Yds. of Crushed Rock Surface Course

SECTION E
INFORMATION ONLY

RURAL DRIVE AND INTERSECTIONS NOTES

SHEET NO. 3-E

CELL NAME

Use Note E01 for Rural Drives.

Concrete, Asphalt & Gravel are all types of surfacing.

*The width shown in the note is for an Earth Drive.
The 2-S Sheet will show the width of the surfacing
(Normally 24').*

*"Lay" Driveway Pipes &
"Build" Road/Crossroad Pipes.*

*You DO NOT need to note (Salvage) when
"Removing and Relaying" a driveway pipe.*

"Surface Intersection" notes are for Resurfacing Projects.

- E01 Sta. ___+__ Lt.
Lay __" x __' Driveway
Culvert Pipe & Build Earth
Drive (__' Wide) on __%
Grade & Surface.
See Sheet 2-S.
- E02 STA. ___+__ RT.
__" x __' C.M. DR. PIPE
Remove. Relay & Extend __',
1-Conn. Band & Build Earth
Drive (__' Wide) on
__% Grade.
- E03 Sta. ___+__ Lt.
Build Earth Drive (__' Wide)
on __% Grade & Surface.
See Sheet 2-S.
- E04 Sta. ___+__ Lt.
Build Earth Drive (__' Wide)
on __% Grade for __' then
__%.
- E05 STA. ___+__ RT.
__" x __' C.M. DR. PIPE
Remove and Relay at
Sta. ___+__ Rt.
- E06 Sta. ___+__ Rt.
Relay __" x __' Corrugated
Metal Drive Pipe from
Sta. ___+__ Lt., Extend __'
1-Conn. Band & Build Earth
Drive (__' Wide) on
__% Grade.
- E07 Surface 3-Way Intersection.
See Sheet 2-S.
- E08 Surface 4-Way Intersection.
See Sheet 2-S.

SECTION E
INFORMATION ONLY

RURAL DRIVE AND INTERSECTIONS NOTES

SHEET NO. 4E

CELL NAME

E09 Sta. ___+__ Rt.
Surface Driveway.
See Sheet 2-S.

E10 Build 3-Way Intersection.
See Sheet 2-S.

E11 Build 4-Way Intersection.
See Sheet 2-S.

E12 Sta. ___+__ to
Sta. ___+__
Build __ Tons of Gravel
Surface Course.

E13 Sta. ___+__ to
Sta. ___+__
Build __ Cu. Yds. of Gravel
Surface Course.

E14 Sta. ___+__ to
Sta. ___+__
Build __ Tons of Crushed
Rock Surface Course.

E15 Sta. ___+__ to
Sta. ___+__
Build __ Cu. Yds. of Crushed
Rock Surface Course.

*"Build Intersection" notes are for Full Grading
Projects, or Intersections that are new.*

*SURFACE COURSE:
Paid by the Ton for Districts 1, 2 & 3.
Paid by Cu. Yds. for the other Districts.*

*If it is intended for the contractor to spread the gravel,
the designer must include a note with the Comp. File for a
Special Provision to be written.*

SECTION F MEDIAN CROSSOVERS,
MAINTENANCE TURNAROUNDS
AND TEMPORARY NOTES

SHEET NO. 1-F

**MEDIAN CROSSOVERS, MAINT. TURNAROUNDS &
TEMPORARY ROADS NOTES SHEET INDEX**

SHEET 1-F	MEDIAN CROSSOVERS, MAINT. TURNAROUNDS & TEMPORARY ROADS NOTES SHEET INDEX
SHEET 2-F	MEDIAN CROSSOVERS, MAINT. TURNAROUNDS & TEMPORARY ROADS NOTES LIST
SHEET 3-F	Temporary Surfacing - Phasing Legend
SHEET 4-F	F01 - Build Corrugated Metal Pipe F02 - Build Median Crossover F03 - Surface Maintenance Turnaround F04 - Build Maintenance Turnaround
SHEET 5-F	F05 - Install Twin Corrugated Metal Pipe F06 - Build Twin Corrugated Metal Pipe F07 - Build C.M. Pipe w/Temp. C.M. Pipe Extension

SECTION F MEDIAN CROSSOVERS,
MAINTENANCE TURNAROUNDS
AND TEMPORARY NOTES

SHEET NO. 2-F

SECTION F

**MEDIAN CROSSOVERS, MAINT. TURNAROUNDS &
TEMPORARY ROADS NOTES LIST**

- F01 - Build Corrugated Metal Pipe
- F02 - Build Median Crossover
- F03 - Surface Maintenance Turnaround
- F04 - Build Maintenance Turnaround
- F05 - Install Twin Corrugated Metal Pipe
- F06 - Build Twin Corrugated Metal Pipe
- F07 - Build C.M. Pipe w/Temp. C.M. Pipe Extension

SECTION F MEDIAN CROSSOVERS,
MAINTENANCE TURNAROUNDS
AND TEMPORARY NOTES

SHEET NO. 3-F

INFORMATION ONLY

The Special Provisions will tell how to pay for the removal of the surfacing and the embankment.

*Need Excavation of established quantity for Temporary Road removal shown in Earthwork notes.
The Comps. need to state removal quantity and whether or not it is to be removed by milling.*

"Temporary Surfacing" includes Asphalt or Concrete (Contractors Option).

*The removal of temporary surfacing is included in the cost of placing the Temporary Surfacing.
(Same contractor that put it in - removes it)*

NOTE: It is only Temporary if it is removed under the same project as it was built.

TEMPORARY SURFACING - (PHASING)

LEGEND

 *Temporary Surfacing*

LEGEND

*Show Construction with symbology and legend.
The symbol selected must be unique to project.
Typical Section is NOT required if this Legend is used.
A Construction Note on plans is NOT required.*

 *—“ Temporary Asphaltic Concrete Pavement (on prepared subgrade)
(or Concrete whichever is specified)*

LEGEND

*Typical Section is required if this Legend is used.
A Construction Note on plans is NOT required.*

 *Temporary Asphaltic Concrete Pavement
(or Concrete whichever is specified)*

SECTION F MEDIAN CROSSOVERS,
MAINTENANCE TURNAROUNDS
AND TEMPORARY NOTES

SHEET NO. 4F

INFORMATION ONLY

CELL NAME

CROSSOVERS

- F01 Sta. ___+__ to
Sta. ___+__
Build __" x __' Corrugated
Metal Pipe. Special Plan _C.
- F02 Sta. ___+__
Build Median Crossover.
Special Plan _C.

*Median Drainage & Crossovers:
If the pipe is to be furnished by the State,
use the term "Install" rather than "Build"*

Special Plan _C and/or See Sheet 2-T.

MAINTENANCE TURNAROUNDS

- F03 Sta. ___+__
Surface Maintenance
Turnaround. See Sheet 2-T.
- F04 Sta. ___+__
Build Maintenance Turnaround.
See Sheet 2-T.

When only surfacing an existing Maintenance Turnaround.

*When Building a new Maintenance Turnaround
(Includes Surfacing)*

**SECTION F MEDIAN CROSSOVERS,
MAINTENANCE TURNAROUNDS
AND TEMPORARY NOTES**

SHEET NO. 5-F

INFORMATION ONLY

Use the term 'Install' if the pipe is to be furnished by the State.

Use the term 'Build' if the pipe is to be furnished by the Contractor.

Remove Temporary Road with item Excavation (Established Quantity). Pipe removal is subsidiary to "Excavation Established Quantity".

DO NOT call for the Temporary Pipes to be removed. The removal of pipes will be subsidiary to the obliteration of the Temporary Road. It will be noted in the Spec's if it is to be Salvaged.

Show Embankment Quantity required to build Temporary Road with Earthwork Note.

Do NOT place build note for Temporary Road surfacing on plans. It is covered on the 2-T Sheet.

Normally a Temporary Road will have it's own unique ξ stationing (i.e. 7000), also it's own plan & profile sheet and has a Typical Section drawn on the 2-T Sheets.

The Temporary Road ξ is shown, and labeled on the project plan & profile sheet. Temporary Road details should NOT be shown on the mainline plans.

Add this note to the mainline plans:

**DNST
STD.CEL**

For Details not shown see Temporary Road Plan & Profile Sheet

Place Horizontally on Plan Portion of Plan & Profile Sheet.

Show the dimension for final pipe size. Removing Temp. Pipe and reinstalling the F.E.S. is covered in the Special Provisions.

If you are phasing the construction of a drainage structure, handle on the drainage cross sections, with dimensions, stating Phase 1, Phase 2.

DO NOT phase the construction notes in the plans.

EXAMPLE: (EXTENDING EXISTING PIPE)
TEMPORARY ROAD (W/TEMP. PIPE)
(SEE NOTE C12)

STA. _____+_____

____'X _____' C.M. PIPE W/HDWLS.

D.A.=__Ac., Q__=__cfs, H.W.=__'

Remove Headwalls & Extend

____' Lt. & ____' Rt. Build

Metal Flared End Sections,

Plan 410-R_. ____° Elbow,

__-Conn. Bands. (Temporary:

Includes __' C.M. Pipe &

____° Elbow)

Exc.=__ Cu. Yds.

CELL NAME

TEMPORARY ROADS

F05 Sta. __+__
Install Twin __" x __'
Corrugated Metal Pipe.

F06 Sta. __+__
Build Twin __" x __'
Corrugated Metal Pipe.

F07 Sta. ___+__
Build __" x __' Corrugated
Metal Pipe w/Metal Flared
End Sections. Plan 410-R_.
Exc. = __ Cu. Yds.
(w/__' Temp. C.M. Pipe
Extension, __-Conn. Band).

SECTION G SEWER NOTES

SHEET NO. 16

SEWER NOTES SHEET INDEX

SHEET 1-G	SEWER NOTES SHEET INDEX
SHEET 2-G	SEWER NOTES LIST
SHEET 3-G	G01 - Build Round Equivalent Reinforced Concrete Sewer Pipe G02 - Build Reinforced Concrete Sewer Pipe G03 - Build Junction Box G04 - Build Curb Inlet G05 - Build Manhole w/Cast Iron Cover G06 - Adjust Manhole to Grade & Build Cast Iron Cover G07 - Build Manhole Type "-"
SHEET 4-G	G08 - Adjust Manhole to Grade G09 - Adjust Water Valve to Grade G10 - Reconstruct Manhole G11 - Repair Inlet Top G12 - Build Median Inlet G13 - Build Area Inlet w/Grate G14 - Build Area Inlet w/Bar G15 - Build Area Inlet w/Pedestrian Guard

SECTION G SEWER NOTES

SHEET NO. 26

SECTION G

SEWER NOTES LIST

- G01 - Build Round Equivalent Reinforced Concrete Sewer Pipe
- G02 - Build Reinforced Concrete Sewer Pipe
- G03 - Build Junction Box
- G04 - Build Curb Inlet
- G05 - Build Manhole w/Cast Iron Cover
- G06 - Adjust Manhole to Grade & Build Cast Iron Cover
- G07 - Build Manhole Type "-"
- G08 - Adjust Manhole to Grade
- G09 - Adjust Water Valve to Grade
- G10 - Reconstruct Manhole
- G11 - Repair Inlet Top
- G12 - Build Median Inlet
- G13 - Build Area Inlet w/Grate
- G14 - Build Area Inlet w/Bar
- G15 - Build Area Inlet w/Pedestrian Guard

SECTION G SEWER NOTES

SHEET NO. 3-6

INFORMATION ONLY

CELL NAME

Refer to Sheet 3-C2 for Pipe-Arch to Round Equivalent conversion table and example notes.

Excavation is subsidiary for Sewers, Junction Boxes, Catch Basins, Inlets, Retaining Walls & Steps.

Keep Pipe notes separate from Junction Box notes.

Junction Box may require either a Special Plan or a Standard Plan.

This example indicates the Type of Manhole is optional. The Type of Cast Iron Cover will be specified as:

Type A - (Storm Sewer)

or

Type B (Sanitary Sewer)

Telescopic Type: Frame & Flange, Type I
Non-Telescopic Type: Frame only, Type II Ring
Type III : Normally used outside of pavement.

TYPES OF MANHOLE: "A", "B" AND "C"

Types "A" & "B" are round

Type "C" is square

Use Type of Manhole only if you want to eliminate the Contractors option.

G01 Sta. ___+__
Build __" x __' Round
Equivalent Reinforced
Concrete Sewer Pipe w/Inlet
& Outlet in Curb Inlet.

G02 Sta. ___+__
Build __" x __'
Reinforced Concrete Sewer
Pipe w/Inlet in Curb Inlet
& Outlet in Junction Box.

G03 Sta. ___+__
Build Junction Box,
Plan 443-R_. $X = \text{---}'\text{---}''$,
 $Y = \text{---}'\text{---}'' \times Y_1 = \text{---}'\text{---}''$

G04 Sta. ___+__
Build Curb Inlet.
Plan 443-R_. $X = \text{---}'\text{---}''$,
 $A = \text{---}'\text{---}''$, $Y = \text{---}'\text{---}''$

G05 Sta. ___+__
Build Manhole w/Cast Iron
Cover, Type __, Frame &
Flange. Plan 435-R_.

G06 Sta. ___+__
Adjust Manhole to Grade &
Build Cast Iron Cover,
Type __ Frame & Flange.
Plan 435-R_.

G07 Sta. ___+__
Build Manhole, Type _ with
Cast Iron Cover, Type _ &
Frame, Type _ . Plan 435-R_.

SECTION G SEWER NOTES

SHEET NO. 46

INFORMATION ONLY

CELL NAME

G08 Sta. ___+__
Adjust Manhole to Grade.

G09 Sta. ___+__
Adjust Water Valve to Grade.

G10 Sta. ___+__
Reconstruct Manhole.
Plan 435-R1.

G11 Sta. ___+__
Repair Inlet Top.
Special Plan _C.

Obtain Median Inlet Special Plan from Bridge Dept.

G12 Sta. ___+__
Build Median Inlet.
Special Plan _C. X = __'-__"

G13 Sta. ___+__
Build Area Inlet with Grate,
Type __. Special Plan _C.
X = __'-__"

*Obtain these Special Plans from Drafting Dept.:
Special Plan 4330 1 "Area Inlet with Bar"
Special Plan 4333 1 "Area Inlet with Grate"*

G14 Sta. ___+__
Build Area Inlet with Bar.
Special Plan _C. X = __'-__"

G15 Sta. ___+__
Build Area Inlet w/Pedestrian
Guard. Special Plan _C.

SECTION H REMOVAL NOTES

SHEET NO. 1H

REMOVAL NOTES SHEET INDEX

SHEET 1-H	REMOVAL NOTES SHEET INDEX
SHEET 2-H	REMOVAL NOTES LIST
SHEET 3-H	H01 - Remove Fence H02 - Remove Discharge Structure H03 - Remove Concrete Ditch Liner H04 - Remove Driveway H05 - Remove Asphalt Surface H06 - Remove Concrete Median Surfacing H07 - Remove Pavement H08 - Remove Concrete Pavement & Crush H09 - Remove Walk
SHEET 4-H	H10 - Remove Combination Curb and Gutter H11 - Remove Curb See Sheet 2-T H12 - Remove Curb H13 - Remove Guardrail (Sta.) H14 - Remove Guardrail (Sta. to Sta.) H15 - Remove Guard Posts H16 - Clear Tract H17 - Remove Building
SHEET 5-H	H18 - Abandon Well H19 - Remove Curb Inlet H20 - Remove Retaining Wall H21 - Remove -- Lin. Ft. of Retaining Wall H22 - Remove -- Lin. Ft. of Concrete Barriers H23 - Remove Sign, Post & Footing Delineator Removal Information

SECTION H REMOVAL NOTES

SHEET NO. 2-H

SECTION H

REMOVAL NOTES LIST

- H01 - Remove Fence
- H02 - Remove Discharge Structure
- H03 - Remove Concrete Ditch Liner
- H04 - Remove Driveway
- H05 - Remove Asphalt Surface
- H06 - Remove Concrete Median Surfacing
- H07 - Remove Pavement
- H08 - Remove Concrete Pavement & Crush
- H09 - Remove Walk
- H10 - Remove Combination Curb and Gutter
- H11 - Remove Curb See Sheet 2-T
- H12 - Remove Curb
- H13 - Remove Guardrail (Sta.)
- H14 - Remove Guardrail (Sta. to Sta.)
- H15 - Remove Guard Posts
- H16 - Clear Tract
- H17 - Remove Building
- H18 - Abandon Well
- H19 - Remove Curb Inlet
- H20 - Remove Retaining Wall
- H21 - Remove -- Lin. Ft. of Retaining Wall
- H22 - Remove -- Lin. Ft. of Concrete Barriers
- H23 - Remove Sign, Post & Footing

SECTION H REMOVAL NOTES

SHEET NO. 3-H

INFORMATION ONLY

CELL NAME

The Existing Topography should indicate the type of Fence (such as Wood, Chain Link, or Ornamental) IF it requires a special removal note.

H01 *Sta. ___+__
Remove __ Lin. Ft. of Fence.*

Discharge Structure is removed as 1-each. This note can be used to remove "Approach Slab Drains". It can include the Inlet and also the Outlet Pipe. The Crossroad Pipe needs to be removed separately.

H02 *STA. ___+__
DISCHARGE STRUCTURE.
Remove.*

*Remove Ditch 'LINER' by Sq. Yds.
Build Ditch 'LINING' by Lin. Ft.*

H03 *Sta. ___+__ to
Sta. ___+__ Lt.
Remove __ Sq. Yds. of
Concrete Ditch Liner.*

For removing Concrete or Asphalt driveway DO NOT specify the type of material to be removed. If asphalt can be buried in vicinity of driveway, a note is NOT required (Full Grading or Safety Section).

H04 *Sta. ___+__
Remove __ Sq. Yds. of
Driveway.*

NOTE:
Removing Earth Drives does NOT require a note.

This applies to Existing Asphalt. If asphalt surface is to be removed by 'Milling' it will be shown on the 2-T sheet and addressed in the Special Provisions. In this case a removal note on the Plans is NOT required.

H05 *Sta. ___+__
Remove __ Sq. Yds. of
Asphalt Surface.*

For the exception to this note, see Temporary Road Removal information in Section F.

Asphalt Median surfacing is removed as 'ASPHALT SURFACE'.

H06 *Sta. ___+__
Remove __ Sq. Yds. of
Concrete Median Surfacing.*

On a rural project, you do not need a note if all of the roadway is being removed, nor do you need to cross hatch the roadway. But, if the roadway is being partially removed, or various segments are being removed, a note is required and the roadway area should show removal cross hatching.

H07 *Sta. ___+__ to
Sta. ___+__
Remove __ Sq. Yds. of
Pavement.*

'PAVEMENT' includes Concrete, Asphalt & Brick. If 'BRICK SURFACE' is to be removed a Special Provision is required. Do NOT show the thickness of the pavement to be removed on the plans. (Intergral Curb can also be removed with the Rdwy. Pvm't)

H08 *Sta. ___+__ to
Sta. ___+__
Remove __ Sq. Yds. of
Concrete Pavement & Crush.*

H09 *Sta. ___+__ to
Sta. ___+__ Lt.
Remove __ Sq. Yds. of Walk.*

SECTION H REMOVAL NOTES

SHEET NO. 4H

INFORMATION ONLY

CELL NAME

H10 Sta. ___+__ to
 Sta. ___+__ Lt.
 Remove __ Lin. Ft. of
 Combination Curb and Gutter.

REMOVING CURB ONLY:

If the curb is integral with pavement, show Curb Removal Sketch on sheet 2-T.
 For examples, see the 'CRD' cell from the 'Typical.cel' cell library or Standard Detail 1380 5.

Note:

Integral Curb can be removed with the Roadway Pavement and shall not be removed separately.

If the curb is not integral w/pavement a removal sketch is NOT required.

H11 Sta. ___+__ to
 Sta. ___+__ Lt.
 Remove __ Lin. Ft. of Curb.
 See Sheet 2-T.

H12 Sta. ___+__ to
 Sta. ___+__ Lt.
 Remove __ Lin. Ft. of Curb.

Note H13: Use the Station of the Structure when removing the entire guardrail installation.

Will the guardrail be reset?
 Will it be stockpiled at the Maintenance Yard?
 IF SO, YOU NEED TO SAY "Remove and Salvage" in the note.
 Refer to Notes B08, B09 & B10.

Removing guardrail can also be from Station to Station.

H13 Sta. ___+__
 Remove __ Lin. Ft. of
 Guardrail.

H14 Sta. ___+__ to
 Sta. ___+__ Lt.
 Remove __ Lin. Ft. of
 Guardrail.

NO GUARDRAIL - JUST POSTS
 Define the number of Guard Posts to be removed.

H15 Sta. ___+__ to
 Sta. ___+__ Lt.
 Remove __ -Guard Posts.

Keep "Clear Tract" note separate from "Remove Building" note.

H16 Sta. ___+__ to
 Sta. ___+__ Lt.
 Clear Tract No. _____.

H17 Sta. ___+__ to
 Sta. ___+__ Lt.
 Remove Building.

SECTION H REMOVAL NOTES

SHEET NO. 5-H

INFORMATION ONLY

CELL NAME

H18 Sta. ___+__ Lt.
Abandon Well.

When removing a Curb Inlet, if a pipe is to be abandoned, you DO NOT need to call for the Plug & Abandon Special Plan, as it is subsidiary. See Std. Spec Book Section 203.

H19 Sta. ___+__ Lt.
Remove Curb Inlet.

Paid for as 1-Each when removing the entire wall.

H20 Sta. ___+__ to
Sta. ___+__ Lt.
Remove Retaining Wall.

Paid for as Lin. Ft. when partially removing the wall.

H21 Sta. ___+__ to
Sta. ___+__ Lt.
Remove __ Lin. Ft. of
Retaining Wall.

FOR INFORMATION ONLY

When Barriers were placed in Lieu of Guardrail on a previous project. (Note H22)

H22 Sta. ___+__ to
Sta. ___+__ Lt.
Remove __ Lin. Ft. of
Concrete Barriers.

H23 Sta. ___+__ Lt.
Remove Sign, Post & Footing.

DELINEATOR REMOVAL INFORMATION

WHEN THE CONTRACTOR REMOVES DELINEATORS

A note is NOT needed for removing delineators. This information will be given on the Computation Sheet and in a Special Provision.

WHEN STATE FORCES REMOVE DELINEATORS

Use Standard Note SN20 from the 'std.cel' cell library.

SN20 • All existing delineators on this project
STD.CEL will be removed by state forces.

SECTION J BRIDGE NOTES

SHEET NO. 1-J

BRIDGE NOTES SHEET INDEX

SHEET 1-J	BRIDGE NOTES SHEET INDEX
SHEET 2-J	BRIDGE NOTES LIST
SHEET 3-J	J01 - Dbl. Tee Beam Bridge (Prelim. Note) J02 - Conc. Deck Bridge (Prelim. Note) J03 - Build Steel Girder Bridge J04 - Build Welded Plate Bridge J05 - Transverse Joist Bridge (Prelim. Note) J06 - Build Continuous Girder Bridge J07 - Prestressed Girder Bridge (Prelim. Note) J08 - Dbl. Prestressed Girder Bridge (Widen)
SHEET 4-J	J09 - Build Multi-Span Deck Steel Girder Bridge J10 - Treated Timber Bridge (Prelim. Note) J11 - Pony Truss Bridge (Prelim. Note) J12 - Prestressed Concrete Girder Bridge (Prelim. Note) J13 - Deck Steel Girder & Timber Bridge (Prelim. Note) J14 - Cont. Concrete Slab Bridge (Prelim. Note) J15 - Build Conc. Slab Bridge on Skew J16 - Build Continuous Conc. Slab Bridge
SHEET 5-J	J17 - Build Temporary Bridge J18 - Erect Temporary Bridge

SECTION J BRIDGE NOTES

SHEET NO. 2-J

BRIDGE NOTES LIST

- J01 - Dbl. Tee Beam Bridge (Prelim. Note)
- J02 - Conc. Deck Bridge (Prelim. Note)
- J03 - Build Steel Girder Bridge
- J04 - Build Welded Plate Bridge
- J05 - Transverse Joist Bridge (Prelim. Note)
- J06 - Build Continuous Girder Bridge
- J07 - Prestressed Girder Bridge (Prelim. Note)
- J08 - Dbl. Prestressed Girder Bridge (Widen)
- J09 - Build Multi-Span Deck Steel Girder Bridge
- J10 - Treated Timber Bridge (Prelim. Note)
- J11 - Pony Truss Bridge (Prelim. Note)
- J12 - Prestressed Concrete Girder Bridge (Prelim. Note)
- J13 - Deck Steel Girder & Timber Bridge (Prelim. Note)
- J14 - Cont. Concrete Slab Bridge (Prelim. Note)
- J15 - Build Conc. Slab Bridge on Skew
- J16 - Build Continous Conc. Slab Bridge
- J17 - Build Temporary Bridge
- J18 - Erect Temporary Bridge

SECTION J BRIDGE NOTES

SHEET NO. 3-J

INFORMATION ONLY

CELL NAME

Include the Structure No. with the Bridge Note.

*BRIDGE PLANS ONLY
Note that the Special Plan No. is NOT followed by the character "C".*

J01 STA. ___+___ #(S_____)
_____'-___" & ____-'-___" SPANS.
DBL. TEE BEAM BR. W/___' RDWY.

J02 STA. ___+___ #(S_____)
_____'-___" SPANS CONC. DECK BR.
W/___' RDWY.

J03 *Sta. ___+___ #(S_____)
Build ____-'-___" & ____-'-___"
Spans Deck Steel Girder
Bridge (___' Roadway).
Special Plan __.*

J04 *Sta. ___+___ #(S_____)
Build ____-'-___" & ____-'-___"
Spans Continuous Welded
Plate Bridge Composite Type.
(___' Rdwy). Special Plan __.*

J05 STA. ___+___ #(S_____)
_____'-___" SPANS TRANSVERSE
JOIST BRIDGE.

J06 *Sta. ___+___ #(S_____)
Build ____-'-___" & ____-'-___"
Spans Continuous Girder
Bridge (___' Roadway).
Special Plan __.*

J07 STA. ___+___ #(S_____)
_____'-___" & ____-'-___" SPANS
DBL. PRESTRESSED GIRDER BR.
W/___' RDWY.

J08 STA. ___+___ #(S_____)
_____'-___" & ____-'-___" SPANS
DBL. PRESTRESSED GIRDER BR.
W/___' RDWY.
*(Widen to ___' Roadway).
Special Plan __.*

ABBREVIATIONS FOR EXISTING BRIDGE NOTES	
WORD	ABBREVIATION
Bridge	BR.
Tee	"T"
Double	DBL.
Concrete	CONC.
Deck	DK.
Steel	STL.
Continuous	CONT.
Plate	PL.
Viaduct	VIA.
Wood	WD.
Girder	GRD.
Roadway	RDWY.

INFORMATION ONLY

SECTION J

BRIDGE NOTES

SHEET NO. 4J

CELL NAME

- J09 *Sta. ___+__ #(S_____)*
Build Multi-Span Deck Steel
Girder Viaduct Continuous
Composite Type (___' Roadway).
Special Plan ..
- J10 STA. ___+__ #(S_____)
_____'____'" & _____'____'" SPANS
TREATED TIMBER BR. W/___' RDWY.
- J11 STA. ___+__ #(S_____)
_____'____'" SPANS PONY TRUSS BR.
- J12 STA. ___+__ #(S_____)
_____'____'" SPANS PRESTRESSED
CONC. GIRDER BR. W/___' RDWY.
- J13 STA. ___+__ #(S_____)
_____'____'" SPANS DECK STEEL
GIRDER & _____'____'" SPANS
TIMBER BR. W/___' RDWY.
- J14 STA. ___+__ #(S_____)
_____'____'" SPANS CONT. CONC.
SLAB BR. ON __° SKEW W/___' RDWY.
- J15 *Sta. ___+__ #(S_____)*
Build _____'____'" & _____'____'"
Spans Concrete Slab Bridge
on __° Skew (___' Roadway).
Special Plan ..
- J16 *Sta. ___+__ #(S_____)*
Build _____'____'" & _____'____'"
Spans Concrete Slab
Bridge Continuous Type.
Special Plan ..

SECTION J
INFORMATION ONLY

BRIDGE NOTES
CELL NAME

SHEET NO. 5-J

TEMPORARY BRIDGES

*You do not call out the size, it is addressed
in the Special Provisions.*

*Use 'Build' when the Temp. Bridge is furnished
by the Contractor.*

*Use 'Erect' when the Temp. Bridge is furnished
by the State.*

NQ Removal note - It is handled by Special Provision.

J17 Sta. ___+__
Build Temporary Bridge.
Special Plan ..

J18 Sta. ___+__
Erect Temporary Bridge.
Special Plan ..