

SAFETY REGULATIONS

ALL EXCAVATION AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MARYLAND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (MOSHA) STANDARDS AS SET FORTH IN THE LATEST VERSION OF THE CODE OF MARYLAND REGULATIONS

CONSTRUCTION NOTIFICATION

The Contractor/Owner is to notify the _____ County _____ SOIL CONSERVATION DISTRICT at least 72 hours prior to construction to facilitate any scheduling, layout, or preliminary mobilization necessary to ensure proper construction inspection to enable appropriate certification of the project.

It is the Landowner's responsibility to obtain all County, State, and Federal permits that may be needed, and to maintain this structure and related regulations.

THERE WILL BE NO CHANGES IN SPECIFICATION, DIMENSIONS, OR MATERIALS UNLESS APPROVED BY THE ENGINEER RESPONSIBLE FOR THIS DRAWING. THE DRAWINGS ARE PREPARED COOPERATIVELY BY THE NATURAL RESOURCE CONSERVATION SERVICE FOR THE NAMED LANDOWNER.

CONSTRUCTION FOUND NOT IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS SHALL VIOLATE THE COOPERATIVE AGREEMENT AND ALL DRAWINGS, SPECIFICATIONS, AND QUANTITIES ESTIMATE SHALL IMMEDIATELY BE RETURNED TO THE LOCAL NRCS OFFICE.

GENERAL NOTES:

- PLEASE CONTACT THE SOIL CONSERVATION DISTRICT AT PHONE # AT LEAST 3 DAYS PRIOR TO CONSTRUCTION TO ARRANGE A PRE-CONSTRUCTION MEETING
- A CONSERVATION TECHNICIAN SHALL SET CUT/GRADE STAKES AT THE CONTRACTORS REQUEST
- A CONSERVATION TECHNICIAN MUST BE PRESENT AT THE TIME OF PIPE INSTALLATION, IF REQUIRED

CRITICAL INSPECTION ITEMS

(Roof Runoff)

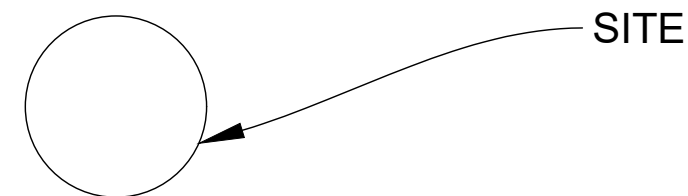
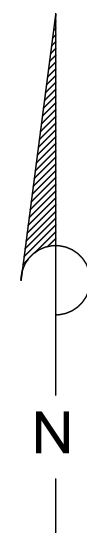
10/20/15

- The landowner will arrange for a pre-construction meeting between the contractor, NRCS and landowner to review the plans, standards and specifications prior to the start of construction.
- There will be no changes in specifications, dimensions, or materials unless approved by the engineer responsible for this drawing.
- The drawings are prepared cooperatively by the Natural Resources Conservation Service for named owner/operator. Construction found not in accordance with these drawings and specifications shall violate the cooperative agreement and all drawings, specifications, and Quantities Estimate shall immediately be returned to the local NRCS office.
- The following is a list of items that must be inspected by the Technician-in-Charge. If cost share is involved, payment may be forfeited if the Technician-in-Charge does not inspect all of the below:

Preconstruction Meeting	Date: _____	Initials: _____
Verify layouts:	Date: _____	Initials: _____
Verify all subgrades:	Date: _____	Initials: _____
Verify Rafter and Fascia Board Requirements:		
Inspect Rafter Ends and Fascia:	Date: _____	Initials: _____
Repair Rafter Ends if needed:	Date: _____	Initials: _____
Repair/Install Fascia:	Date: _____	Initials: _____
Paint or Wrap Fascia:	Date: _____	Initials: _____
Verify Gutter and Downspout Requirements:		
Gutter Size, Type and Slope:	Date: _____	Initials: _____
Gutter Hanger Installation:	Date: _____	Initials: _____
Gutter Drop Outlet Sizes:	Date: _____	Initials: _____
Leader Pipe and Outlet Installation:	Date: _____	Initials: _____
Rodent Guard Installed at Outlet:	Date: _____	Initials: _____
Outlet Protection:	Date: _____	Initials: _____
Verify Placement of Dry Well Collection (When Applicable):		
Material and Size:	Date: _____	Initials: _____
Geotextile Type and Installation:	Date: _____	Initials: _____
Stone Size:	Date: _____	Initials: _____
Collection Sump for Debris (When Applicable):	Date: _____	Initials: _____
Pipe Size, type, connections and slope:	Date: _____	Initials: _____
Backfill of stone to required Dimensions:	Date: _____	Initials: _____
Placement of topsoil:	Date: _____	Initials: _____
All disturbed areas seeded and mulched:	Date: _____	Initials: _____
Other items shown on the plans:	Date: _____	Initials: _____

LANDOWNER - SITE NAME

558 ROOF RUNOFF STRUCTURE



REVISED 7/1/2021

LOCATION MAP



USER TO INSERT SHEET LIST TABLE

AS-BUILT STATEMENT

THE CONSERVATION PRACTICE(S) MEETS OR EXCEEDS NRCS STANDARDS AND SPECIFICATIONS

INSPECTED BY	SIGNATURE _____	DATE _____
CONSTRUCTION APPROVAL	SIGNATURE _____	DATE _____
VERIFIED DISTRICT CONSERVATIONIST	SIGNATURE _____	DATE _____

AS BUILT CONTRACT ITEMS:

PRACTICE	Reportable Amount	Contract Amount

USER TO ENTER PRACTICES

OWNER/CONTRACTOR STATEMENT

I CERTIFY THAT THIS DESIGN HAS BEEN EXPLAINED TO ME BY A REPRESENTATIVE OF THE COUNTY SOIL CONSERVATION DISTRICT, AND I UNDERSTAND THE CONTENTS. ALL CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND SPECIFICATIONS, I FURTHER UNDERSTAND THAT ALL CONSTRUCTION WILL BE UNDER THE INSPECTION OF THIS OFFICE.

OWNER/OPERATOR SIGNATURE _____ DATE _____

CONTRACTOR'S SIGNATURE _____ DATE _____

All disturbed areas to be stabilized within 7 days of completion, using the following recommendations.

Seeding Recommendations

Tall Fescue	65 lb/ac
Perennial Ryegrass or Redtop (tolerates moist sites)	5 lb/ac
White Clover	2 lb/ac
20-40-40 Fertilizer	5 lb/ac
Ground lime 50% oxides	500 lb/ac
Straw Mulch	3 tons /ac
	2 tons/ac

Dates listed are for plant hardiness Zone 6B, dates will need to be changed for other zones.

Seeding Dates

March 1 thru May 15
August 1 thru October 1

It is the landowner responsibility to obtain All County, State, and Federal permits that may be needed, and to maintain this structure and those regulations.

USER TO ENTER SEEDING INFO



Know what's below. Call before you dig.

The Soil Conservation District makes no representation as to the existence or Non-existence of any utilities at the construction site. Shown on these construction drawings are those utilities which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities

MATERIALS LIST

* For bidding purposes only

LANDOWNER - SITE NAME

COUNTY Soil Conservation District

JOB CLASS #

TRACT #



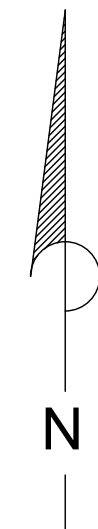
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Drawing No.
MD_0049

Sheet 1 of 4

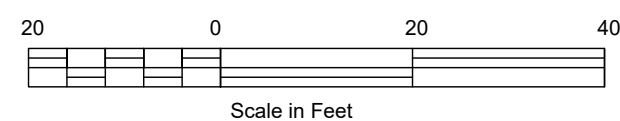
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Drawn	_____
Checked	_____
Approved	_____

_____, Maryland



USER TO INSERT TOPO SURVEY/PLAN MAP

PLAN VIEW

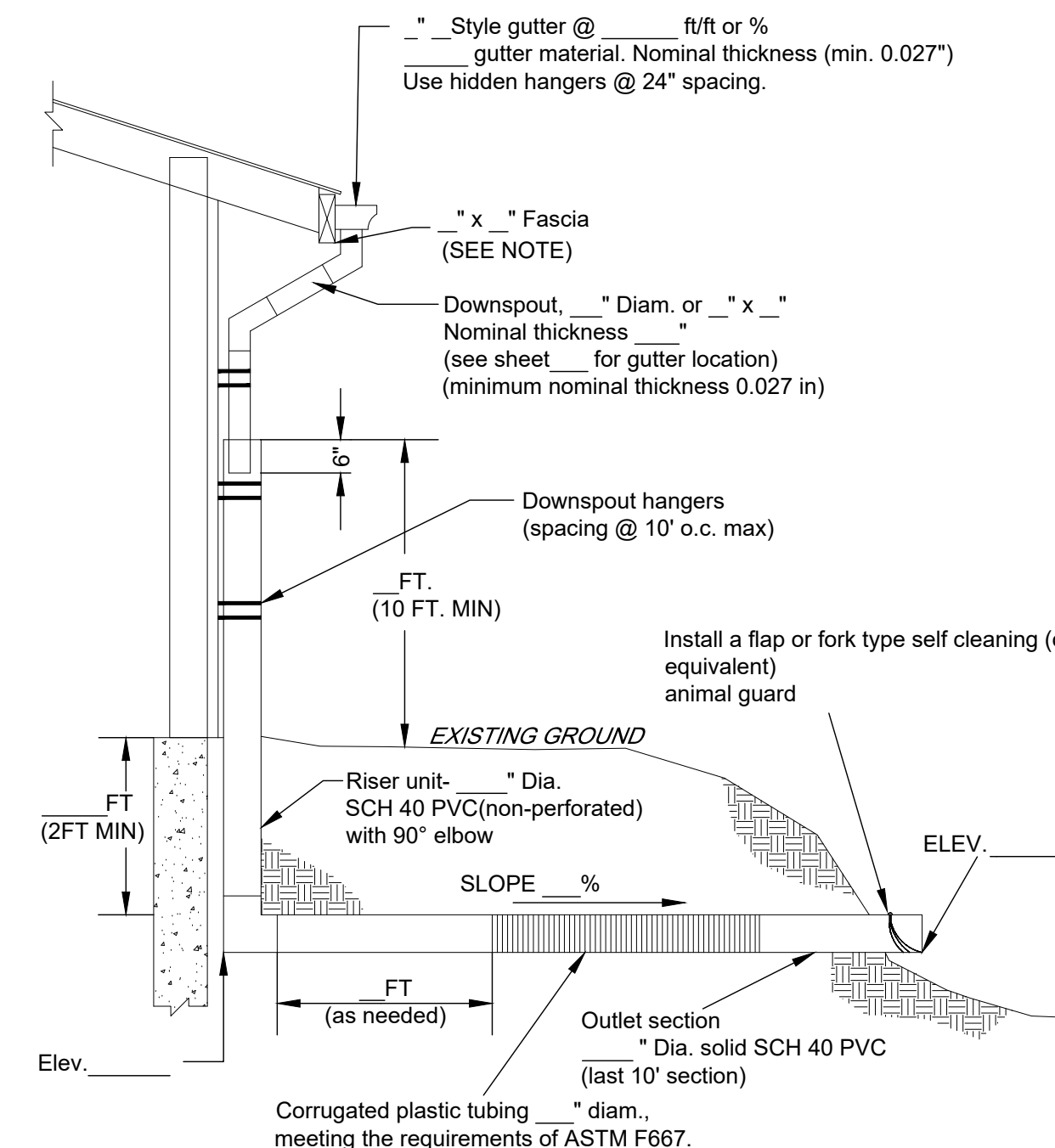


BENCH MARK DESCRIPTIONS

TBM #1 (IP): Elev = ????.??
Top of 1" X 2" wooden hub, marked by witness lath.

TBM #2: Elev = ????.??
Top of 1" X 2" wooden hub, marked by witness lath, near NW corner of building.

TBM #3: Elev = ????.??
Top of bolt in NW corner of concrete.



NOTE:
1) Fascia board material to be spruce, pine, fir or better. Cover with aluminum/vinyl flashing or paint prior to installation of roof gutter.
2) No pressure treated lumber allowed

GUTTER OUTLET DETAIL
Not to scale

ROOF GUTTER CONSTRUCTION SPECIFICATIONS

- All materials and construction shall be in accordance with applicable NRCS standards and construction specifications.
- All components of the completed system shall conform to the lines, grades, elevations, dimensions and materials shown on the plans.
- Any changes in the plans or specifications must be approved by the original plan approver prior to being made. Changes are to be reviewed by the landowner for concurrence.
- All disturbed areas shall be fertilized, seeded, and mulched or otherwise stabilized as required on the construction plans.
- Existing fascia boards that are damaged, rotten, otherwise unstable or with a nominal thickness less than 2 inches, shall be replaced.
- Rafter ends that are damaged or rotted shall be repaired.
- All lumber used for fascia boards or for rafter end repair shall have a nominal thickness of 2 inches. Cover all fascia boards with aluminum or vinyl flashing or paint before the roof gutter is installed.
- Down spout outlet connections shall be the manufacturer's preformed (insert) outlets for the given size shown on the design, unless otherwise approved.
- Aluminum gutters and downspouts shall have a minimum thickness of 0.027 inch.
- Galvanized steel gutters and downspouts shall have a minimum thickness of 28 gage.
- Where animals or equipment may come in contact with downspouts, steel pipe, schedule 40 PVC or similar material will be used for the downspout.
- Roof gutter supports shall have a maximum spacing of 24 inches unless otherwise approved. Roof gutters shall be mounted to the fascia board using hidden hangers, bolts and ferrules, gutter screws and ferrules, or cradles. Other methods must be approved by the engineer. Spike and ferrules are not approved.
- Itemized invoices from suppliers shall be provided to verify gutter and downspout size, length, material, material gage, and hanger type.
- The Soil Conservation District makes no representation as to the existence or nonexistence of any utilities at the construction site. Shown on these construction drawings are those utilities, which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities. Miss Utility should be contacted at 1 800-257-7777.

Date	_____
Designed	_____
Drawn	_____
Checked	_____
Approved	_____

LANDOWNER - SITE NAME

COUNTY Soil Conservation District
JOB CLASS #
TRACT #
_____, Maryland



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MD_0049_RoofRunoff.dwg

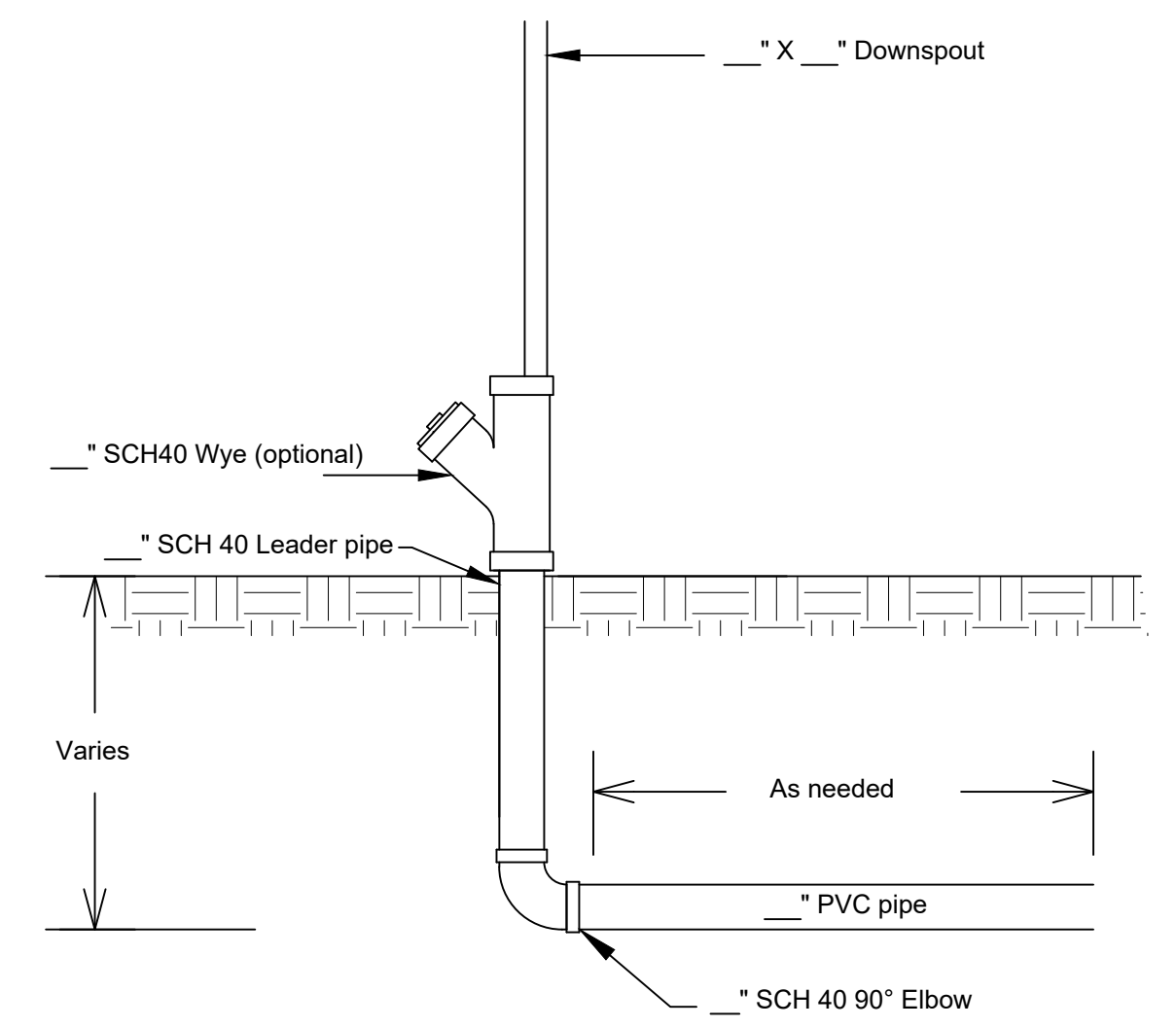
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MD_0049



ROOF GUTTER SIZE AND DESIGNED PITCH:
 ROOF #A : (Enter gutter size and type) : X"(MIN.) IN 100'
 ROOF #B : (Enter gutter size and type) : X"(MIN.) IN 100'
 ROOF #C : (Enter gutter size and type) : X"(MIN.) IN 100'
 ROOF #D : (Enter gutter size and type) : X"(MIN.) IN 100'

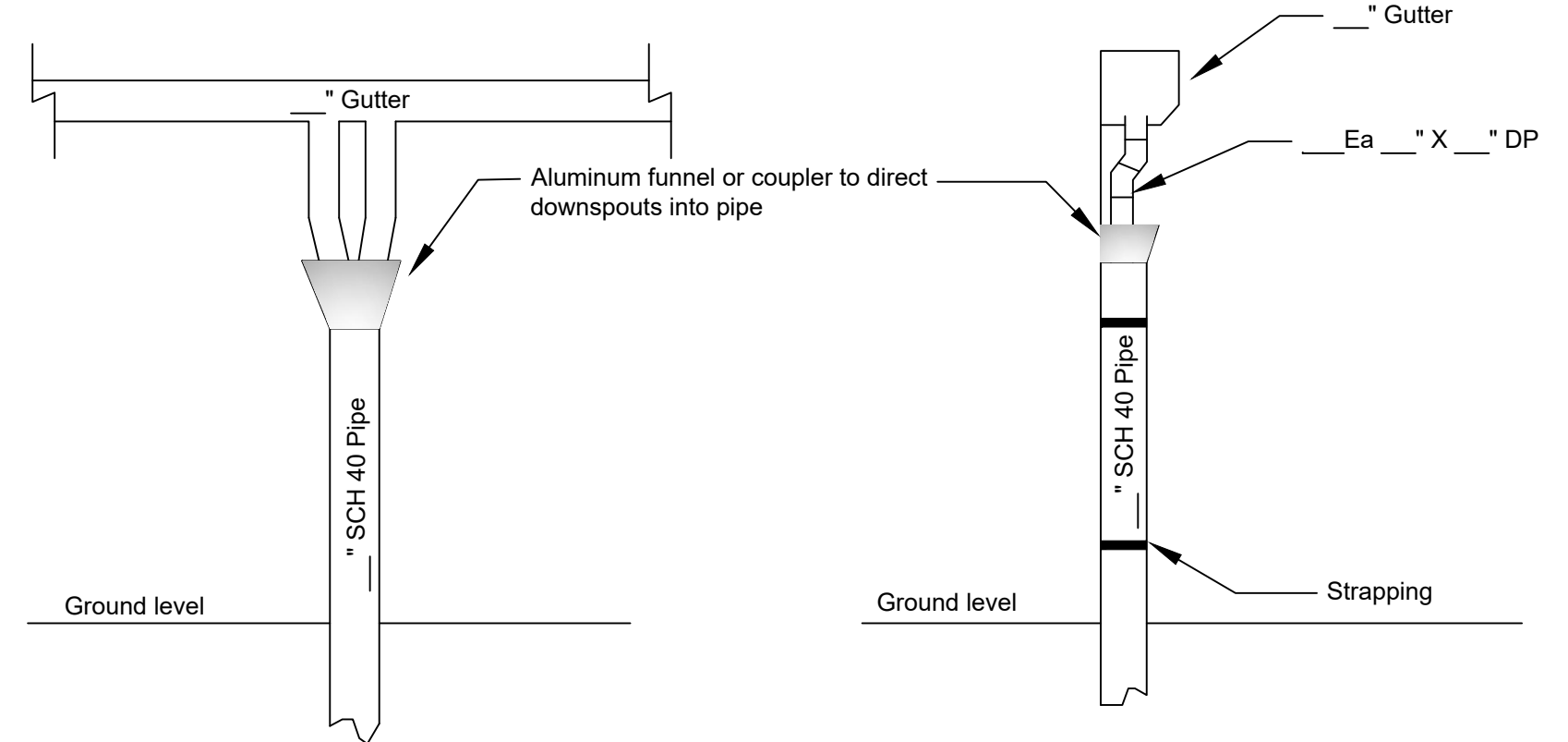
DOWNSPOUT SIZE:
 ROOF #A : XEa of X" x X" Downspout
 ROOF #B : XEa of X" x X" Downspout
 ROOF #C : XEa of X" x X" Downspout
 ROOF #D : XEa of X" x X" Downspout

USER MAY INSERT DESIGN PDF FILE OF GUTTERS AND DOWNSPOUTS
 OR USE ABOVE TEXT TO ENTER IN THE REQUIRED INFORMATION



DETAIL OF LEADER PIPE/DOWNSPOUT INTO UNDERGROUND DRAIN
 Not to scale

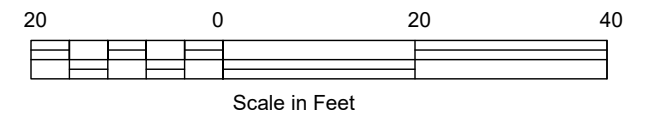
DOUBLE CLICK TO EDIT BLOCK



DETAIL OF LEADER PIPE/DOWNSPOUT FOR DOUBLE DOWNSPOUTS
 Not to scale

DOUBLE CLICK TO EDIT BLOCK

PLAN VIEW OF GUTTERS AND DOWNSPOUTS



Date	----
Designed	----
Drawn	----
Checked	----
Approved	----

LANDOWNER - SITE NAME
 #####
 COUNTY Soil Conservation District
 JOB CLASS #
 TRACT #



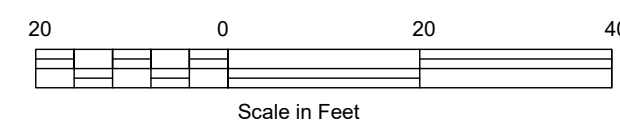
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Drawing No.
 MD_0049

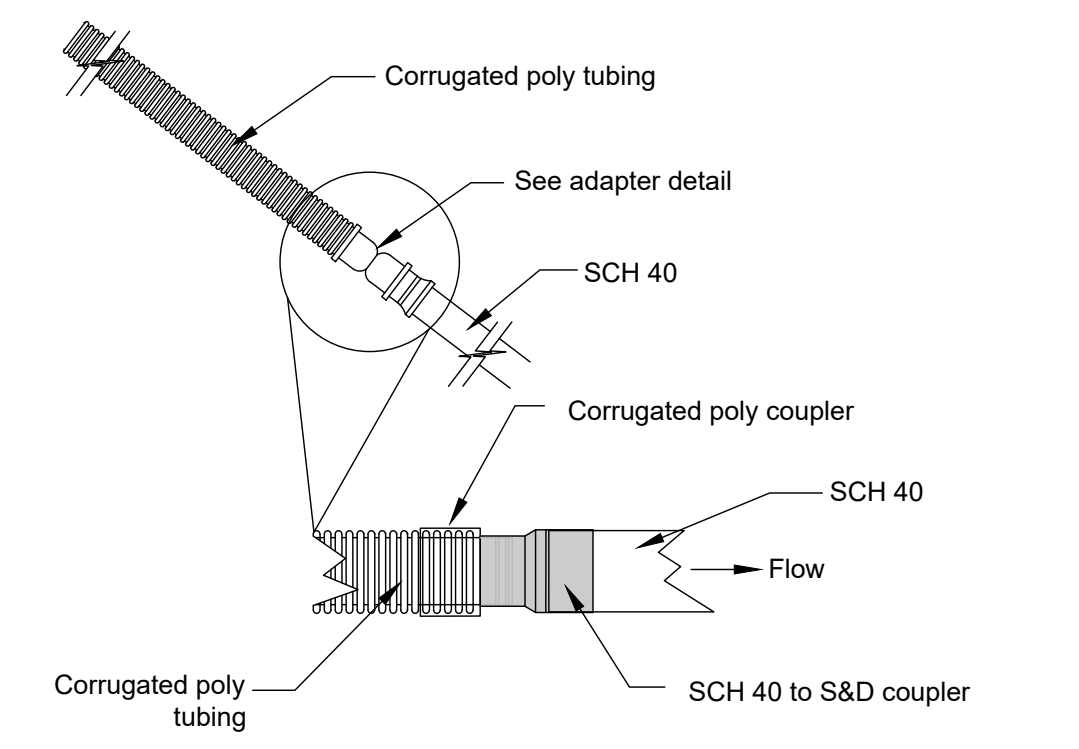


USER TO INSERT MAP OF UNDERGROUND PIPE

PLAN VIEW OF UNDERGROUND PIPE

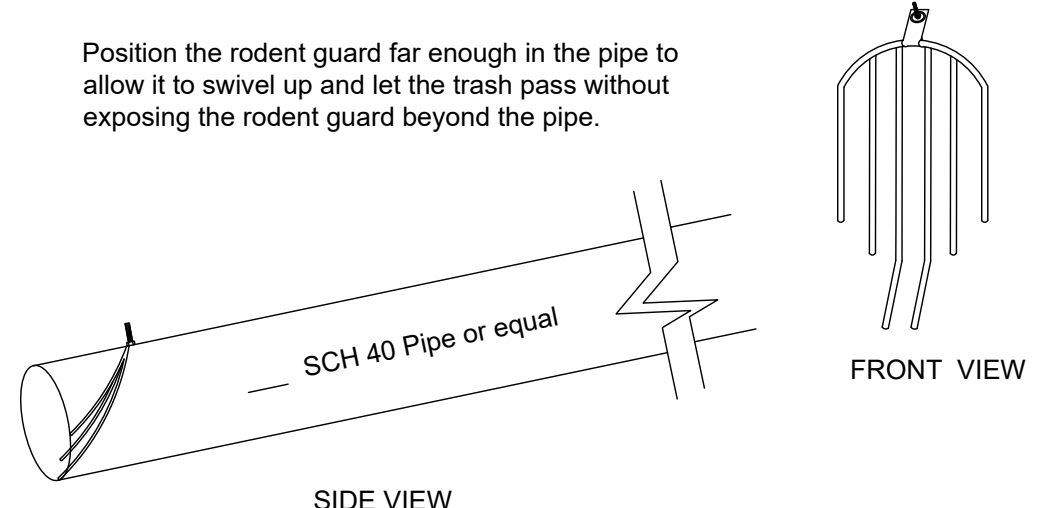


DESIGN REACH				LENGTH IN DESIGN REACH	INPUT "Q" THIS REACH	INPUT UPPER REACHES		MIN GRADE IN REACH	PIPE SIZE	PIPE TYPE	MIN FALL IN 100'
LINE	STA	TO	STA	(FT)	(CFS)	(CFS)	TOTAL	(FT/IN)	(INCHES)		(FT)
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ADAPTER DETAIL
Not to scale

DOUBLE CLICK TO EDIT BLOCK



OUTLET DETAIL
Not to scale

DOUBLE CLICK TO EDIT BLOCK

OUTLET PIPE PROFILE
USER TO MODIFY PER DESIGN

Date

Designed

Drawn

Checked

Approved

LANDOWNER - SITE NAME

COUNTY Soil Conservation District
JOB CLASS #
-----, Maryland

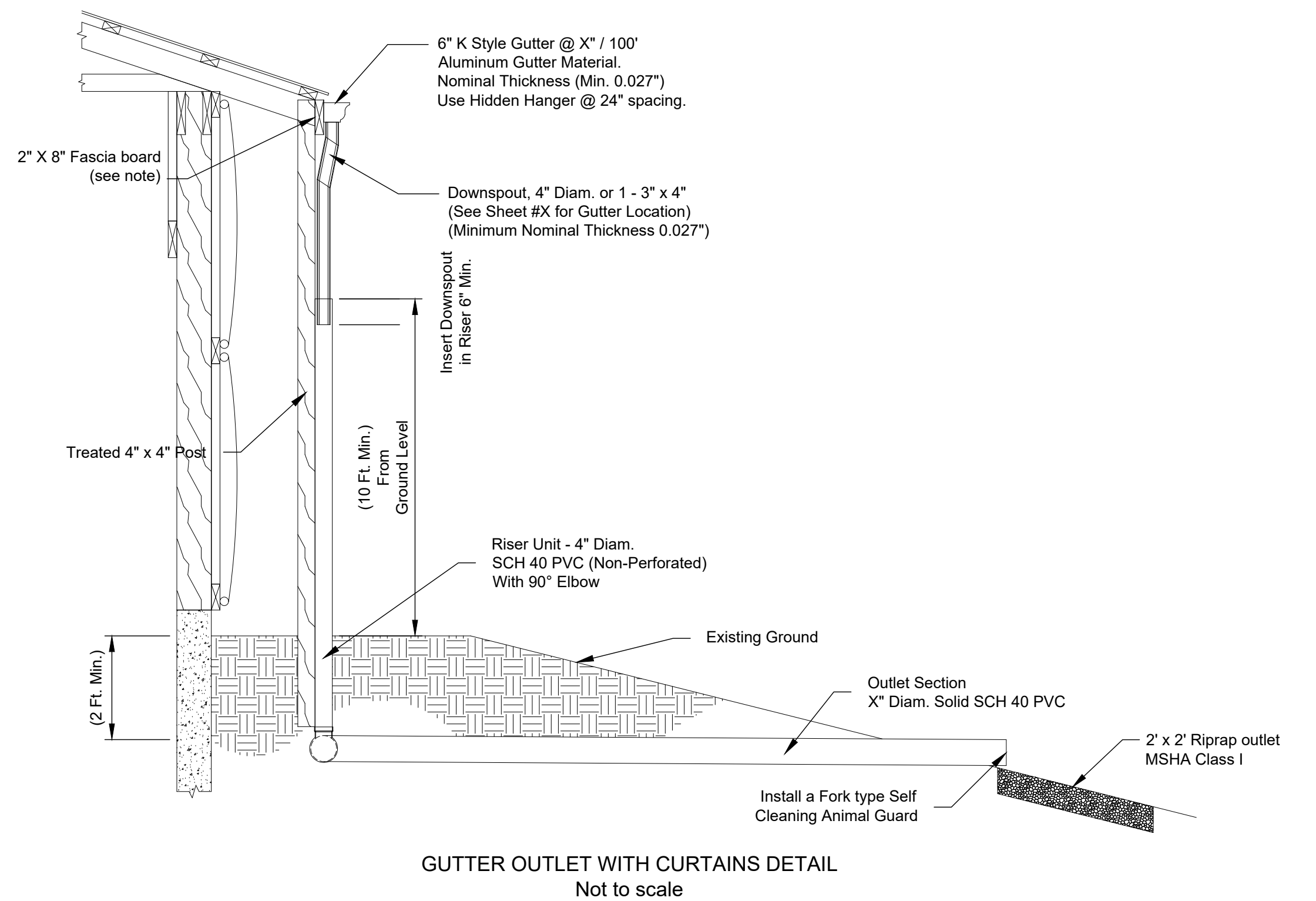
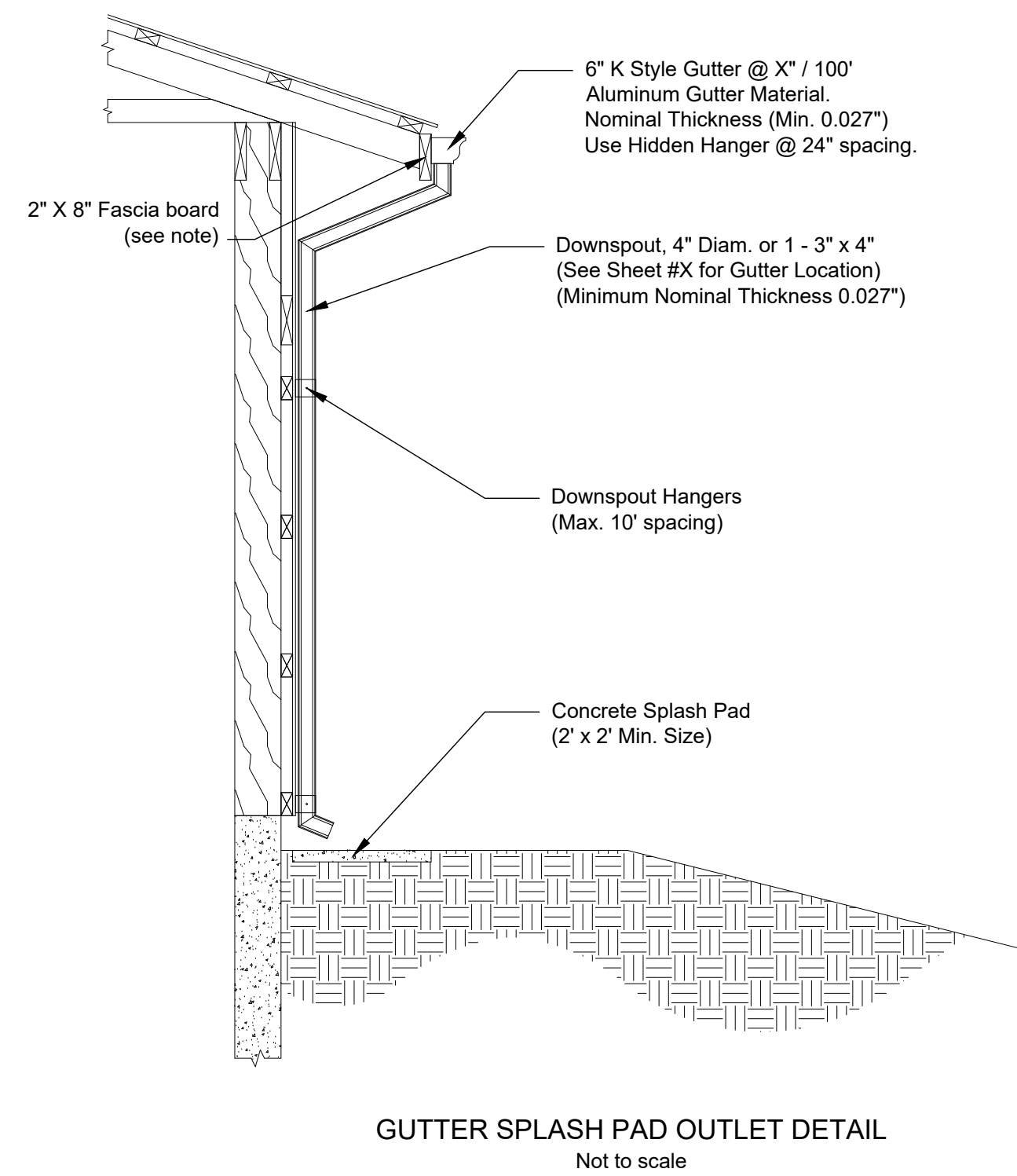
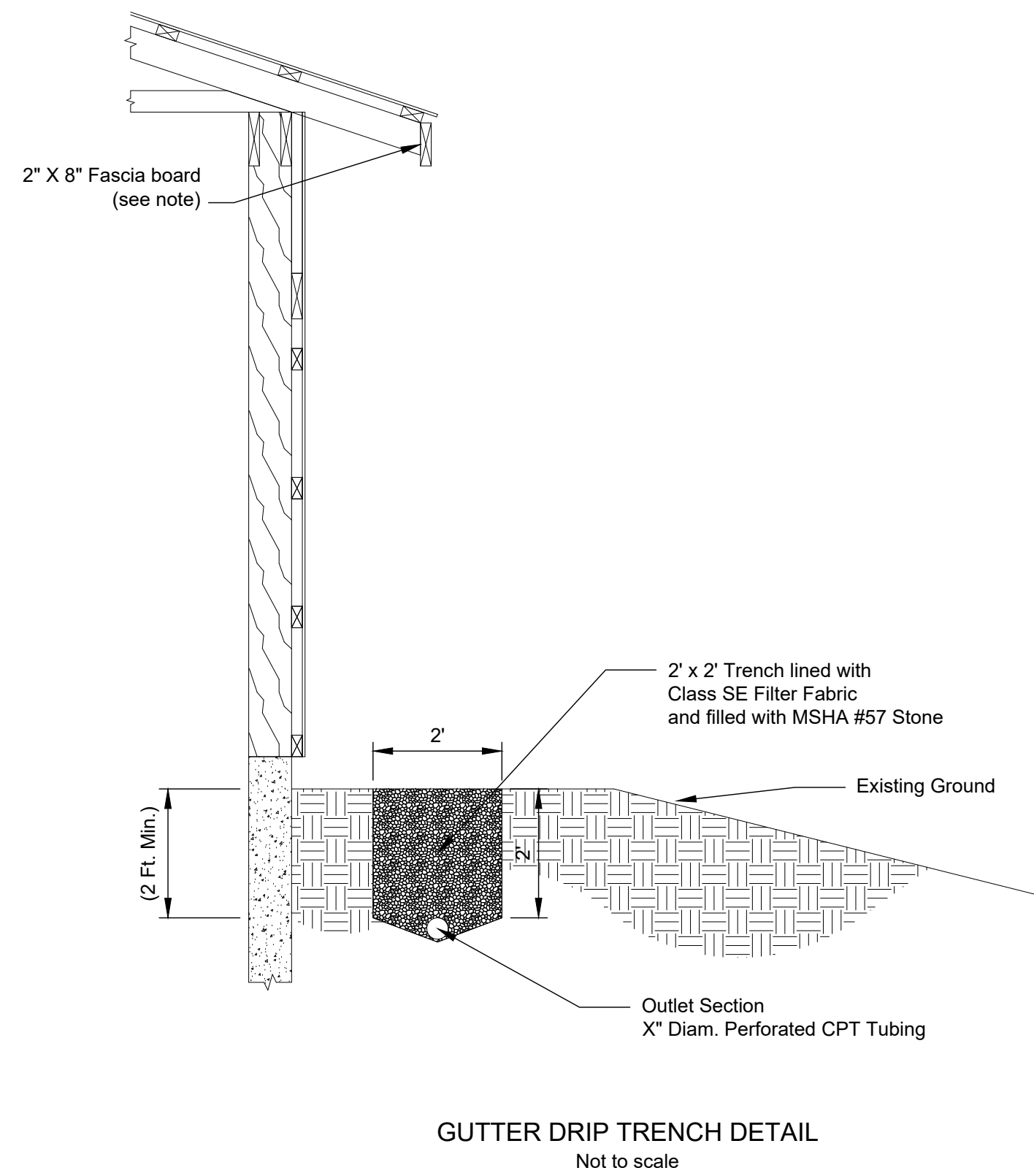
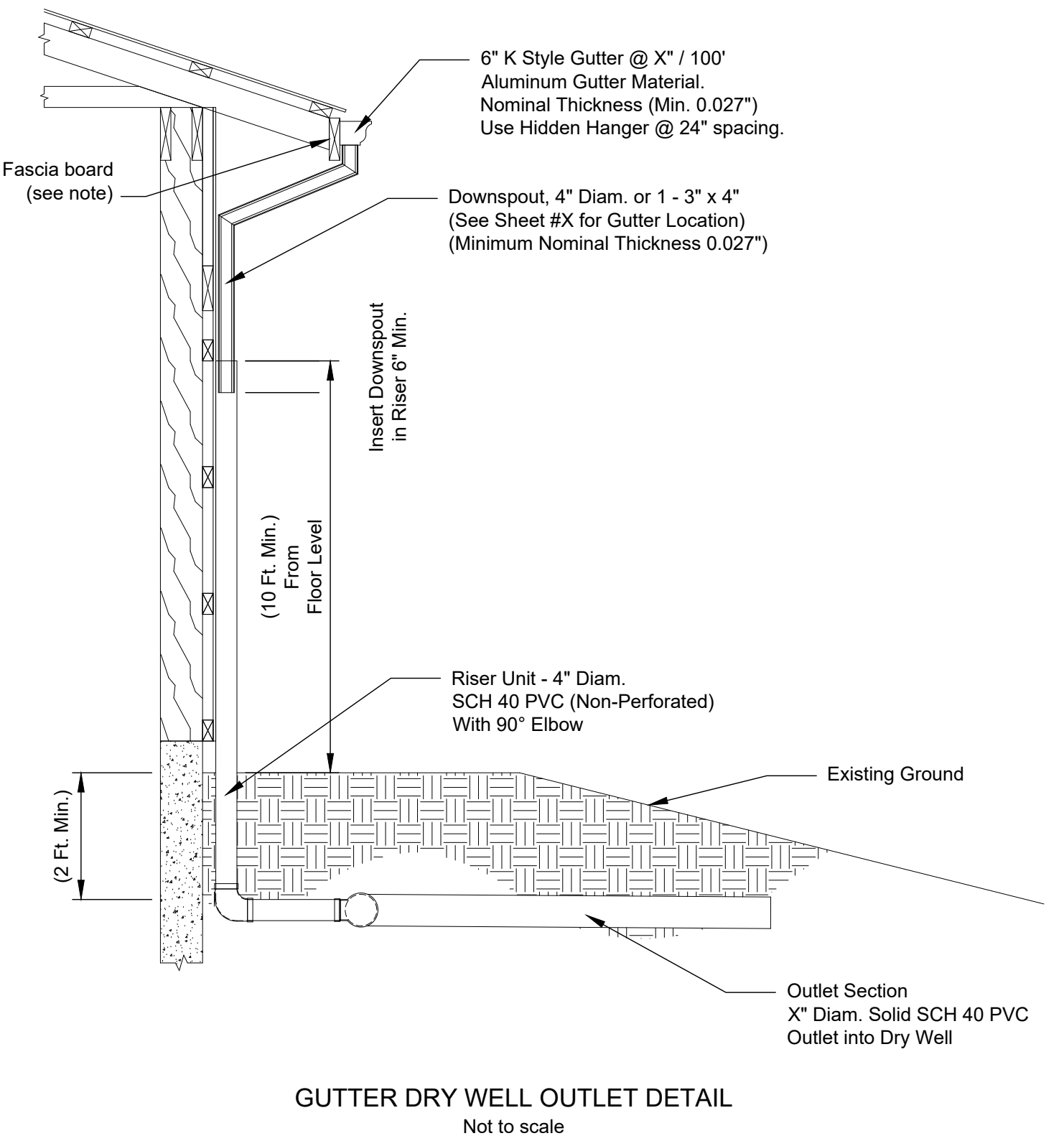
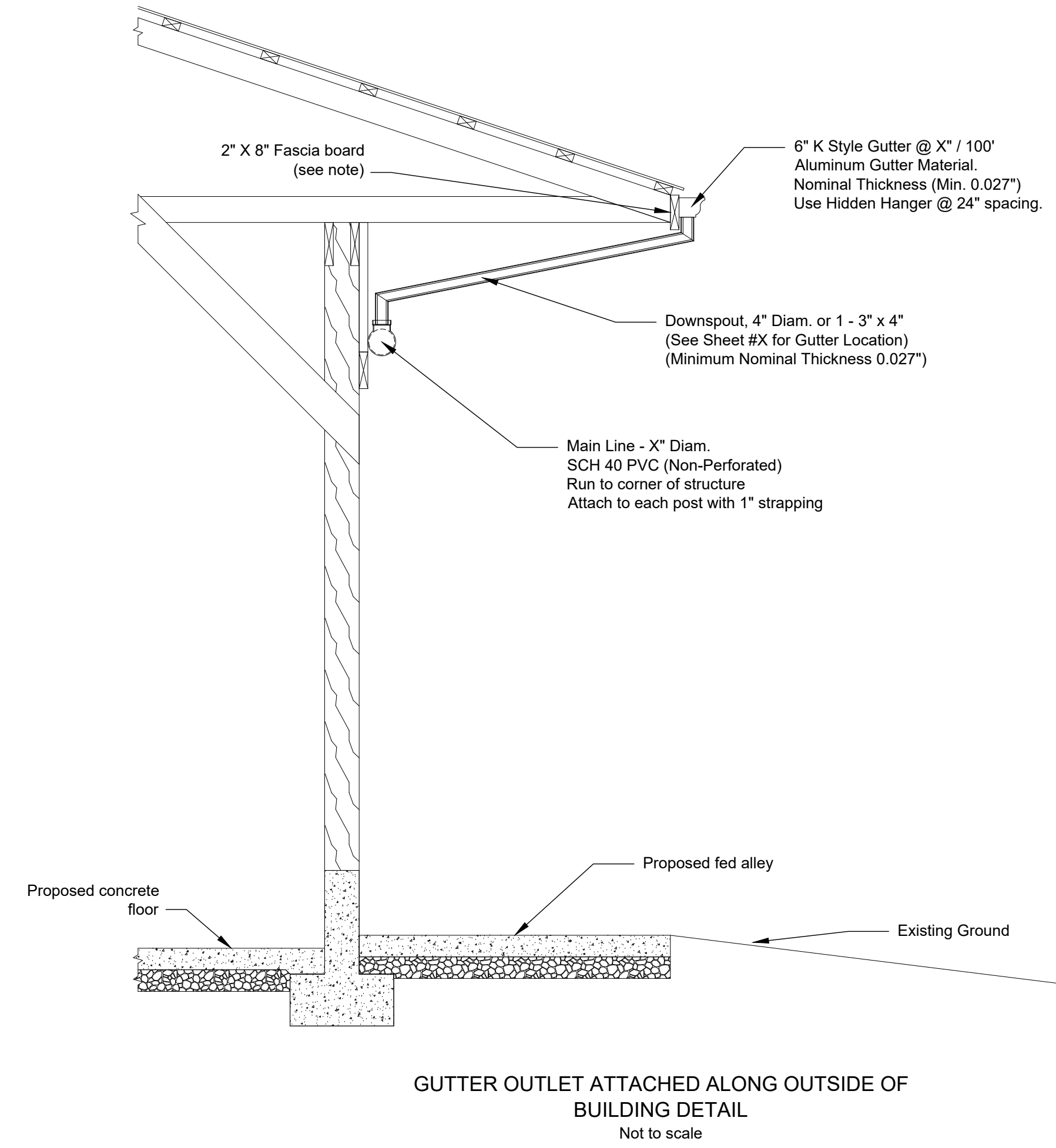
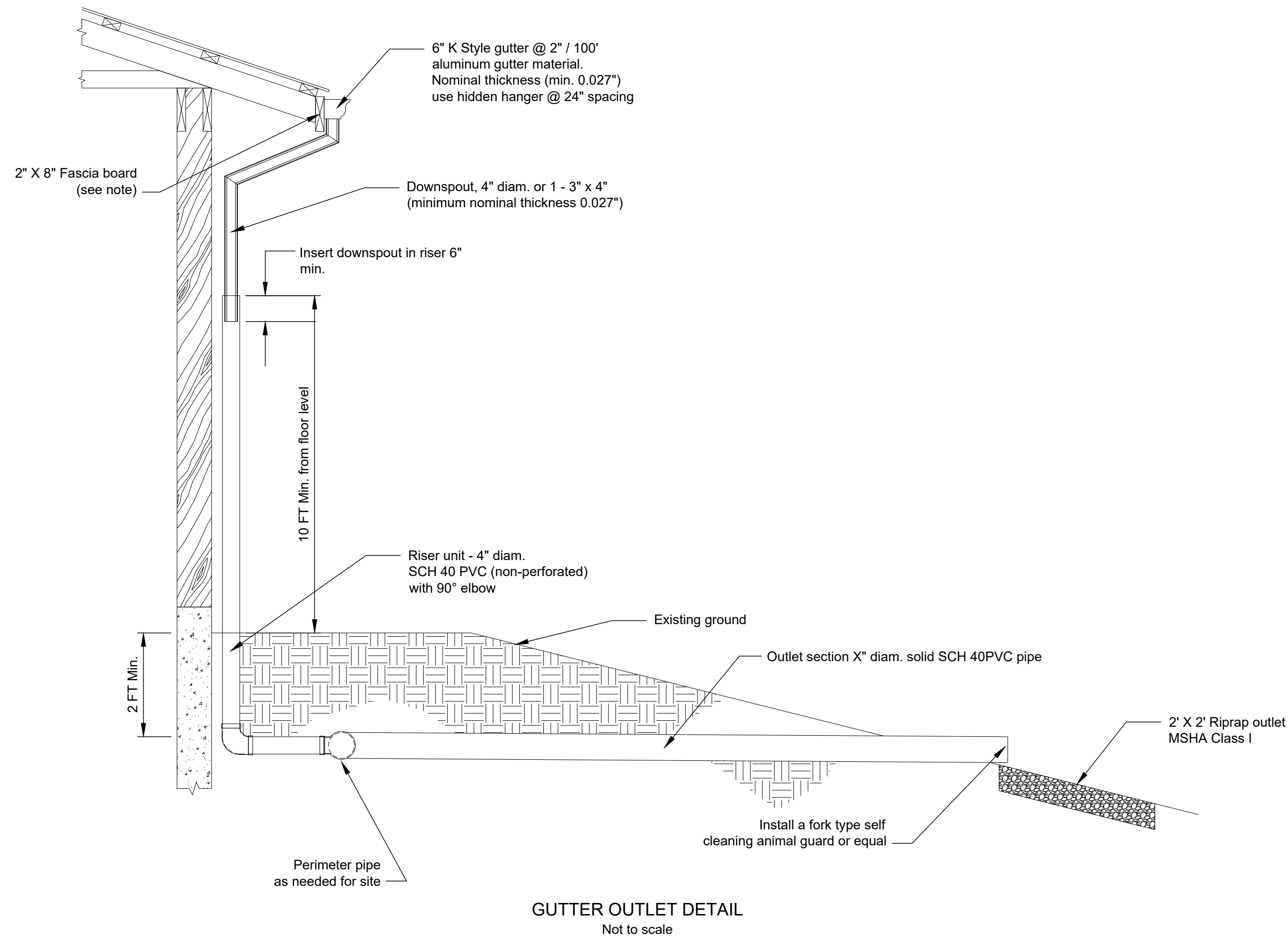
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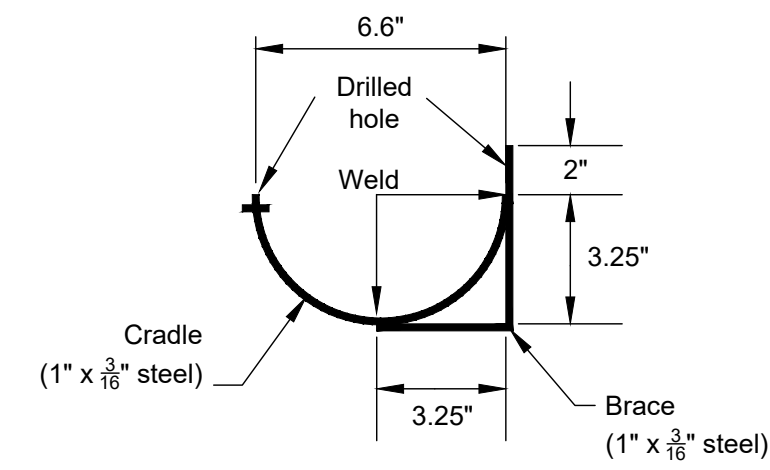
United States Department of Agriculture
Natural Resources Conservation Service

File Name
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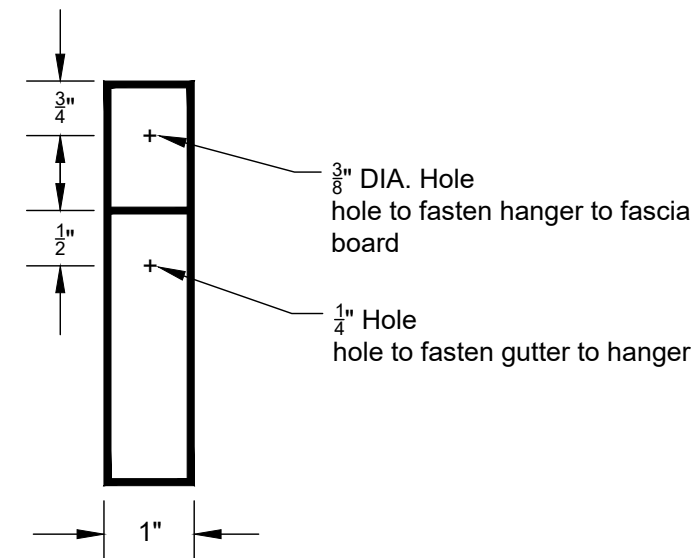
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Sheet 4 of 4





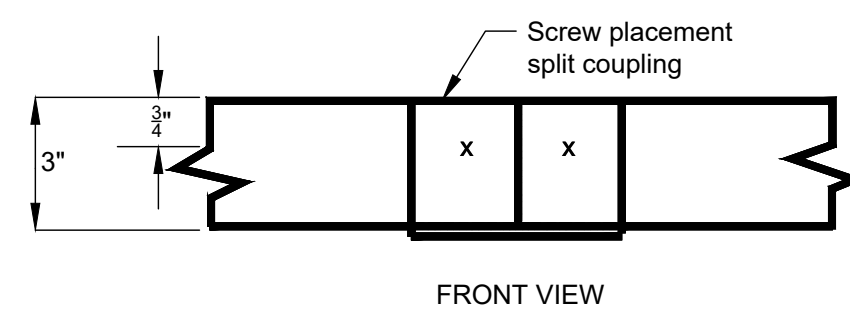
SIDE VIEW



FRONT VIEW

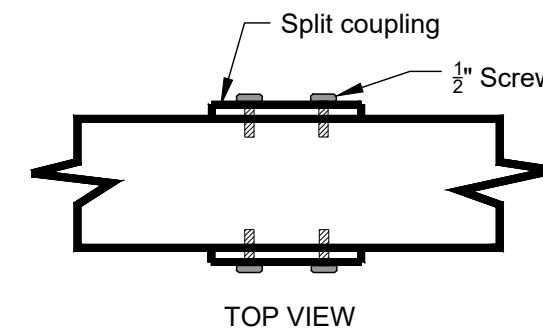
- Gutter hangers shall be made of 1" x 3/16" steel.
- Hanger spacing shall no greater than 32".
- Hangers shall be backed with fascia boards with a minimum nominal thickness of 2 inches.
- Hangers shall be fastened to the fascia board by:
 - Minimum 1/4" dia. bolts (galvanized)
- Fascia boards must be securely fastened to rafters and shall be replaced or repaired as necessary.
- Hangers shall have a minimum one coat of paint.

6 INCH PVC HANGER DETAIL
Not to scale



FRONT VIEW

- NOTES:
- Glue all joints
- Use same screw placement on back side of gutter

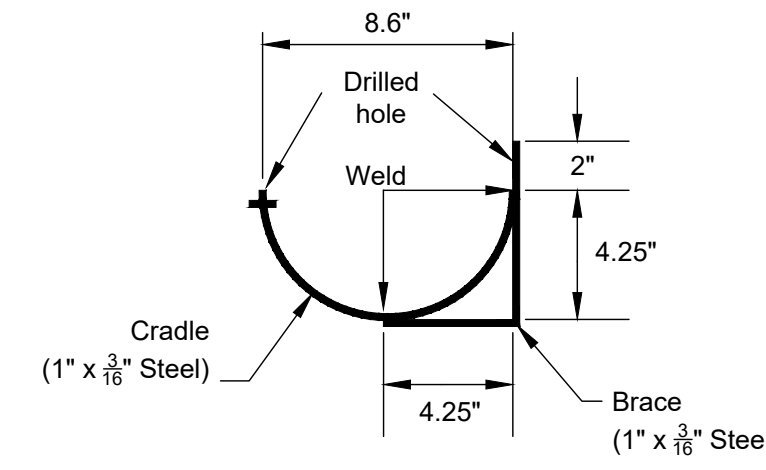


TOP VIEW

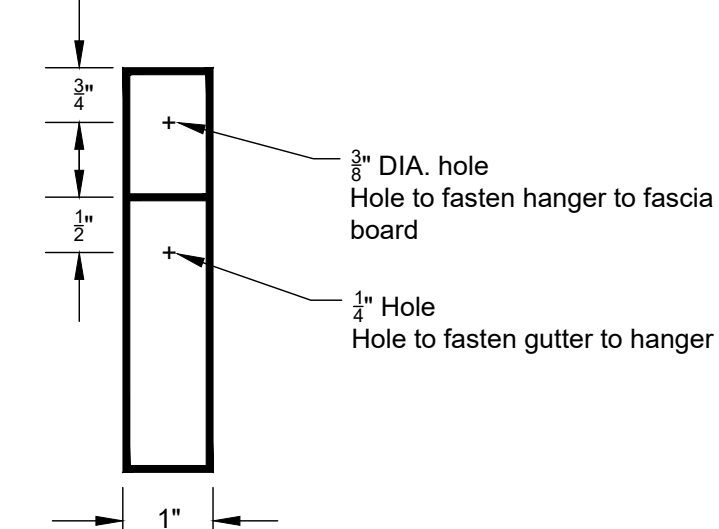
PVC ROOF GUTTER DETAILS

- Gutter shall be split 6" schedule 40 PVC pipe.
- Gutter lengths shall be connected by using split schedule 40 coupling. Each coupling shall be split schedule 40 coupling, each coupling shall be glued and screwed. Screws shall be self tapping with an approximate length of 1/2 inch. Use 4 screws per coupling.
- Gutter ends shall be split schedule 40 caps or similar. Ends shall be fastened by gluing and screwed with 2 self tapping screws as described above.
- Schedule 40 tees shall be used for downspout outlets. Each outlet shall be glued and have a minimum of 4 screws to fasten outlet to the roof gutter.
- The gutter shall be attached to the hangers using 1/4" dia. bolts, one bolt shall be used at each hanger.

6 INCH PVC GUTTER DETAILS
Not to scale



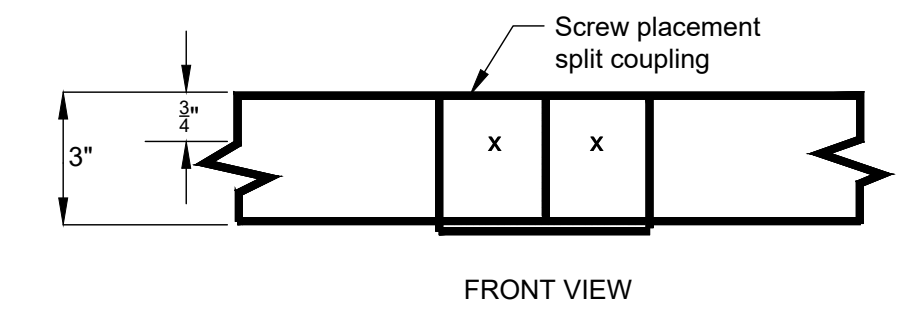
SIDE VIEW



FRONT VIEW

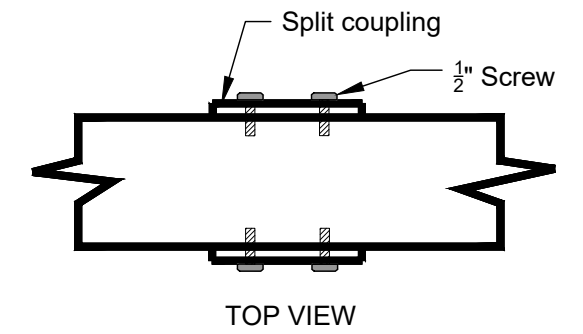
- Gutter hangers shall be made of 1" x 3/16" steel.
- Hanger spacing shall no greater than 32".
- Hangers shall be backed with fascia boards with a minimum nominal thickness of 2 inches.
- Hangers shall be fastened to the fascia board by:
 - Minimum 1/4" dia. bolts (galvanized)
- Fascia boards must be securely fastened to rafters and shall be replaced or repaired as necessary.
- Hangers shall have a minimum one coat of paint.

8 INCH PVC HANGER DETAIL
Not to scale



FRONT VIEW

- NOTES:
- Glue all joints
- Use same screw placement on back side of gutter



TOP VIEW

PVC ROOF GUTTER DETAILS

- Gutter shall be split 8" schedule 40 PVC pipe.
- Gutter lengths shall be connected by using split schedule 40 coupling. Each coupling shall be split schedule 40 coupling, each coupling shall be glued and screwed. screws shall be self tapping with an approximate length of 1/2 inch. Use 4 screws per coupling.
- Gutter ends shall be split schedule 40 caps or similar. Ends shall be fastened by gluing and screwed with 2 self tapping screws as described above.
- Schedule 40 tees shall be used for downspout outlets. Each outlet shall be glued and have a minimum of 4 screws to fasten outlet to the roof gutter.
- The gutter shall be attached to the hangers using 1/4" dia. bolts. One bolt shall be used at each hanger.

8 INCH PVC GUTTER DETAIL
Not to scale

