

SR 1387 DR. ROBINSON RD. EROSION CONTROL PLANS

**These Erosion and Sediment Control Plans
comply with the regulations set forth by the
NCG010000 general construction permit
effective August 3, 2011 issued by the North
Carolina Department of Environment and
Natural Resources Division of Water Quality.**

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	— — — —
1606.01	Special Sediment Control Fence	—△△△△△△△△—
1622.01	Temporary Berms and Slope Drains	—T—
1630.02	Silt Basin Type B	—[Hatched Box]—
1630.03	Temporary Silt Ditch	—D—
1630.05	Temporary Diversion	—D—
1630.06	Special Stilling Basin	—[Symbol]—
1632.03	Rock Inlet Sediment Trap Type C	—[Square]—
1633.01	Temporary Rock Silt Check Type-A	—[Cross-hatched Box]—
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	—[Cross-hatched Box with Circle]—
	Temporary Rock Silt Check Type-B	—[Triangle]—
	Wattle	—[Crescent]—
	Wattle with Polyacrylamide (PAM)	—[Crescent with Circle]—
1634.02	Temporary Rock Sediment Dam Type-B	—[Dam Symbol]—
1635.01	Rock Pipe Inlet Sediment Trap Type-A	—[U-shape]—

EROSION CONTROL & PIPE INSTALLATION SCHEDULE TROUT BUFFER ZONE SEQUENCE GENERAL E&SC NOTES GROUND STABILIZATION CHART

Erosion Control Schedule and Notes

1. Generally, the order of installation of the erosion control measures will be as follows:
 - A. Temporary silt basins shall be installed before clearing and grubbing begins.
 - B. Silt fences and temporary silt ditches shall be installed after clearing and before grading.
 - C. Temporary stone ditch checks with PAM or wattles with PAM shall be installed in all disturbed areas as soon as the disturbance begins.
 - D. Final stone ditch checks or wattles shall be installed as soon as ditch line is established.
 - E. Pipe outlet and inlet protection will be done as soon as the pipe is installed.
 - F. Other permanent erosion control measures are to be implemented as soon as practical.
2. Temporary rock silt checks, type B will be spaced by percent grade as shown in the erosion control plan.
3. No. 5 stone, or equivalent, will be used in conjunction with the temporary rock silt checks in locations where water is leaving the project or entering a pipe.
4. All devices are to be cleaned out when half full.
5. Establish permanent vegetation per ground stabilization chart.

Notes:

For silt basin size see the attached erosion control plans.

PAM is to be placed on all Type A checks and wattles in the erosion control chain except for the final device in HWQ and Trout projects.

Wet Pipe Installation Schedule and Notes

1. Prior to installing any E&SC measures identify permit conditions and impact area limits.
2. Install erosion control devices.
3. Manage the water course. The pipe must be placed in the dry. Install dewatering measures.
4. Remove material and existing pipe while limiting material and sediment from entering stream and escaping the project.
5. Excavation of stream channel shall not exceed 10' on either side of new pipe or culvert unless indicated on permit.
6. Per permit conditions for Corps of Engineers and the Wildlife Resources Commission, all pipes in streams 48" or greater must be buried 12" below streambed elevation. Pipes less than 48" must be buried with 20% of the diameter below streambed elevation.
7. Place the new pipe and compact backfill.
8. Install slope protection on the outlet and inlet ends of the pipe. Also complete installation of erosion control measures and perform maintenance as needed on existing measures.
9. Establish permanent vegetation per ground stabilization chart.
10. More information on wet pipe installation can be found in the BMP manual section 4.2 "Pipe & Culvert installation"

General Erosion Control Sequence & Notes for NC DOT Projects in Trout Buffer Zones

1. Prior to installing any E&SC measures identify permit conditions and impact area limits. Review trout buffer variance approval conditions for any special provisions.
2. All materials should be on the hand before work is commenced.
3. Install EC devices
4. Work within the buffer zone should be sequenced to minimize the length of time that disturbed areas are exposed. Stream bank stabilization, which includes the area from the edge of water to the top of bank, should be phased so that each day's work is a completed work, including provision of adequate ground cover.
5. Graded slopes and fills within the trout buffer zone will within 7 calendar days of completion of any phase of grading be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion.
6. Graded slopes and fills within the trout buffer zone (excluding road shoulders) shall be protected with rolled erosion control product, bonded fiber matrix, or flexible growth medium after seeding.

Notes:

Silt fence backed by woven wire, with a post spacing of 6 feet, shall be used instead of standard silt fence in trout buffer zone. Special sediment control fence shall be used in areas where bedrock is encountered which prohibits the proper anchoring of fabric, and in low points of the silt fence in 3-foot sections to allow for concentrated flows.

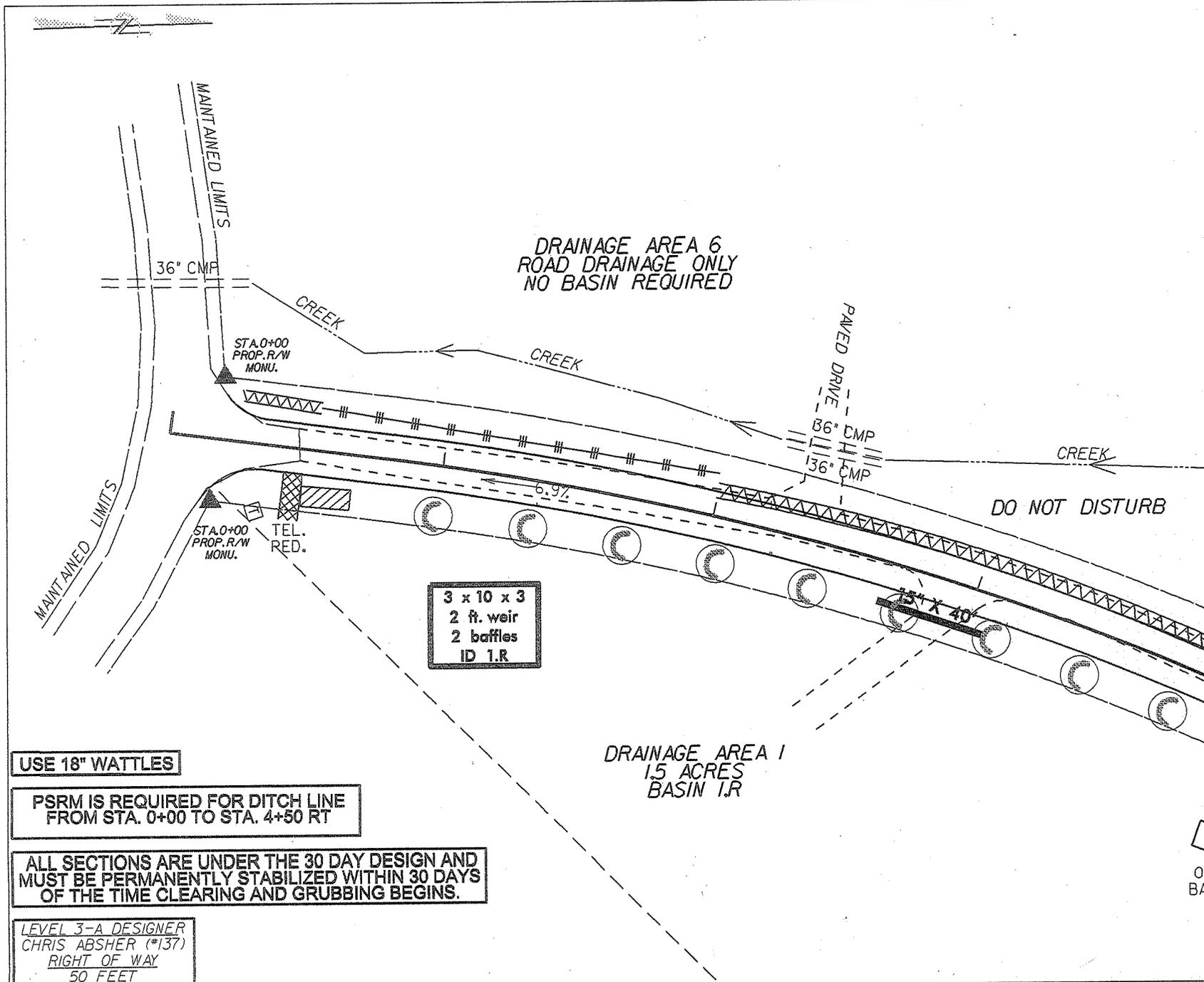
The disturbed areas within the stream buffer shall be restored to native vegetation characteristic of an undisturbed buffer to the extent practical upon completion of construction.

Flyrock protection such as blast mats should be provided for blasting in close proximity to streams.

PAM is to be placed on all Type A checks and wattles in the erosion control chain except for the final device in HWQ and Trout projects.

GROUND STABILIZATION CHART

Site Area Description	Stabilization Time Frame	Stabilization Time Frame Exceptions
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10 ft. or less in length and are not steeper than 2:1, 14 days are allowed
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length
All other areas flatter than 4:1	14 days	None (except for perimeters and HQW zones)



DRAINAGE AREA 6
ROAD DRAINAGE ONLY
NO BASIN REQUIRED

DO NOT DISTURB

3 x 10 x 3
2 ft. weir
2 baffles
ID 1.R.

DRAINAGE AREA 1
15 ACRES
BASIN 1.R.

USE 18" WATTLES

PSRM IS REQUIRED FOR DITCH LINE
FROM STA. 0+00 TO STA. 4+50 RT

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

LEVEL 3-A DESIGNER
CHRIS ABSHER (*137)
RIGHT OF WAY
50 FEET

MATCHLINE SEE SHEET 4

OL
BA

LEVEL 3-A DESIGNER
CHRIS. ABSHER (*137)
RIGHT OF WAY
50 FEET

USE 18" WATTLES

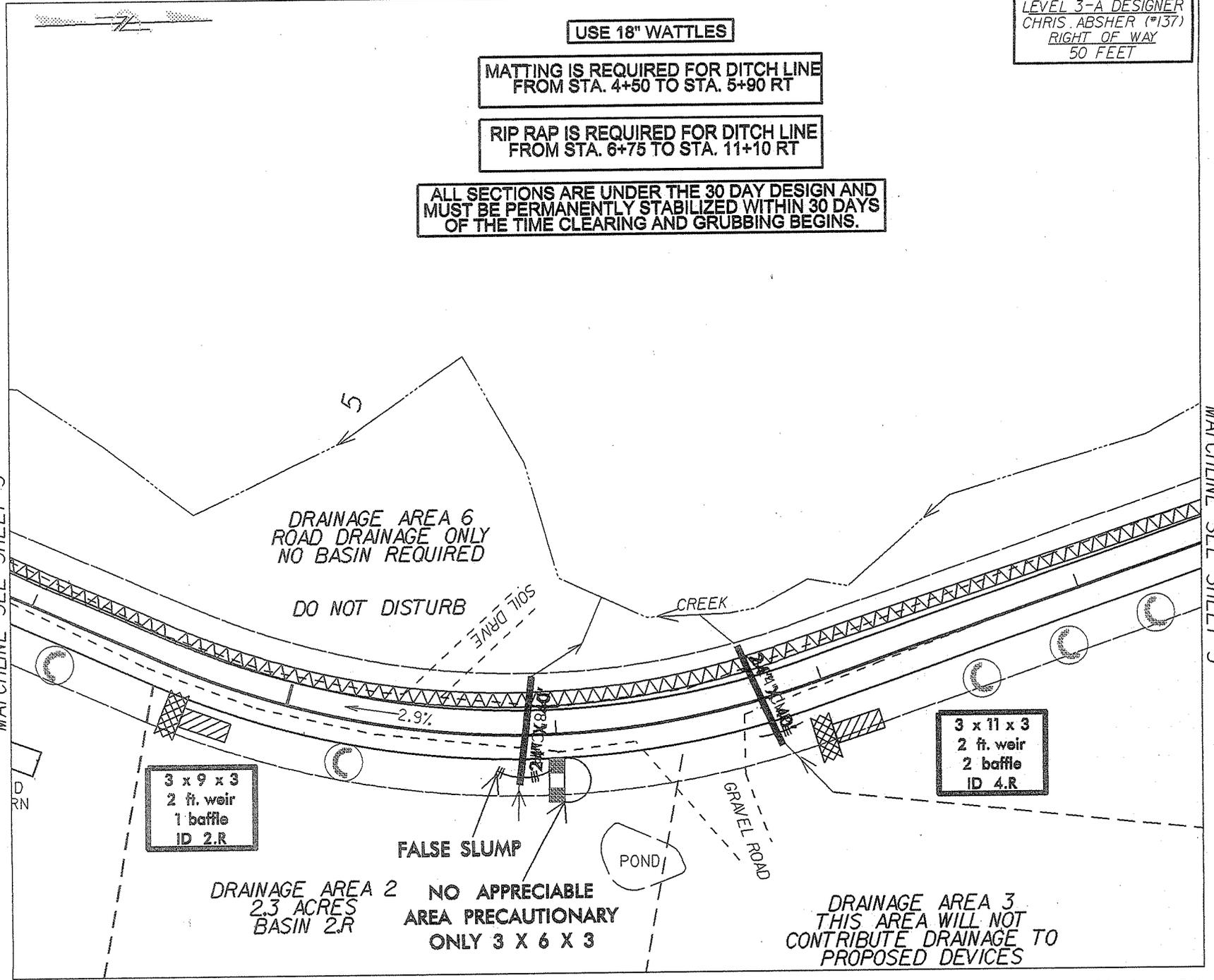
MATTING IS REQUIRED FOR DITCH LINE
FROM STA. 4+50 TO STA. 5+90 RT

RIP RAP IS REQUIRED FOR DITCH LINE
FROM STA. 6+75 TO STA. 11+10 RT

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

MATCHLINE SEE SHEET 3

MATCHLINE SEE SHEET 5



3 x 9 x 3
2 ft. weir
1 baffle
ID 2.R

3 x 11 x 3
2 ft. weir
2 baffle
ID 4.R

DRAINAGE AREA 2
2.3 ACRES
BASIN 2.R

NO APPRECIABLE
AREA PRECAUTIONARY
ONLY 3 X 6 X 3

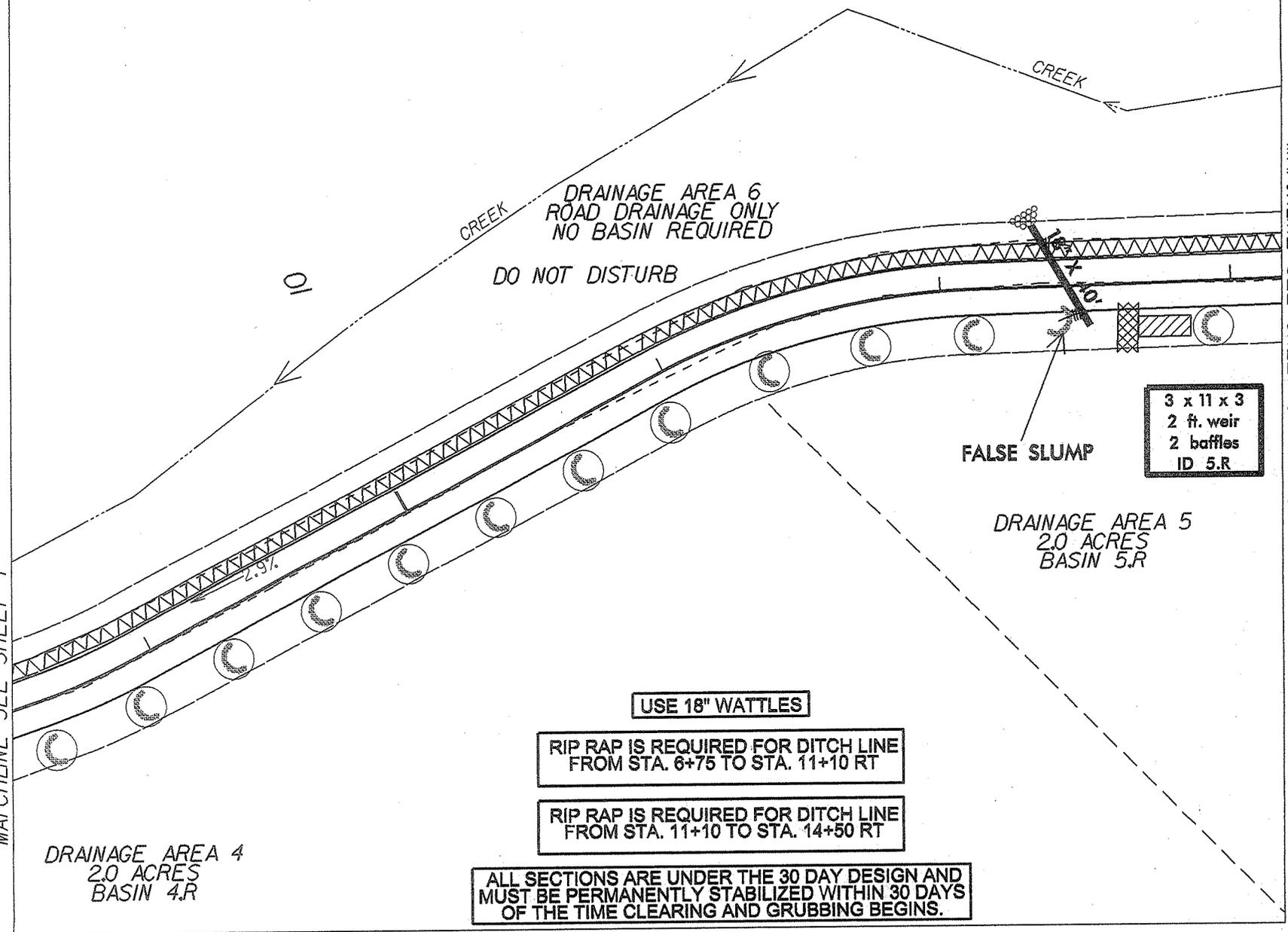
DRAINAGE AREA 3
THIS AREA WILL NOT
CONTRIBUTE DRAINAGE TO
PROPOSED DEVICES

HORIZONTAL SCALE 1" = 50'

LEVEL 3-A DESIGNER
CHRIS ABSHER (#137)
RIGHT OF WAY
50 FEET

MATCHLINE SEE SHEET 4

MATCHLINE SEE SHEET 6



DRAINAGE AREA 4
2.0 ACRES
BASIN 4.R

RIP RAP IS REQUIRED FOR DITCH LINE
FROM STA. 6+75 TO STA. 11+10 RT

RIP RAP IS REQUIRED FOR DITCH LINE
FROM STA. 11+10 TO STA. 14+50 RT

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

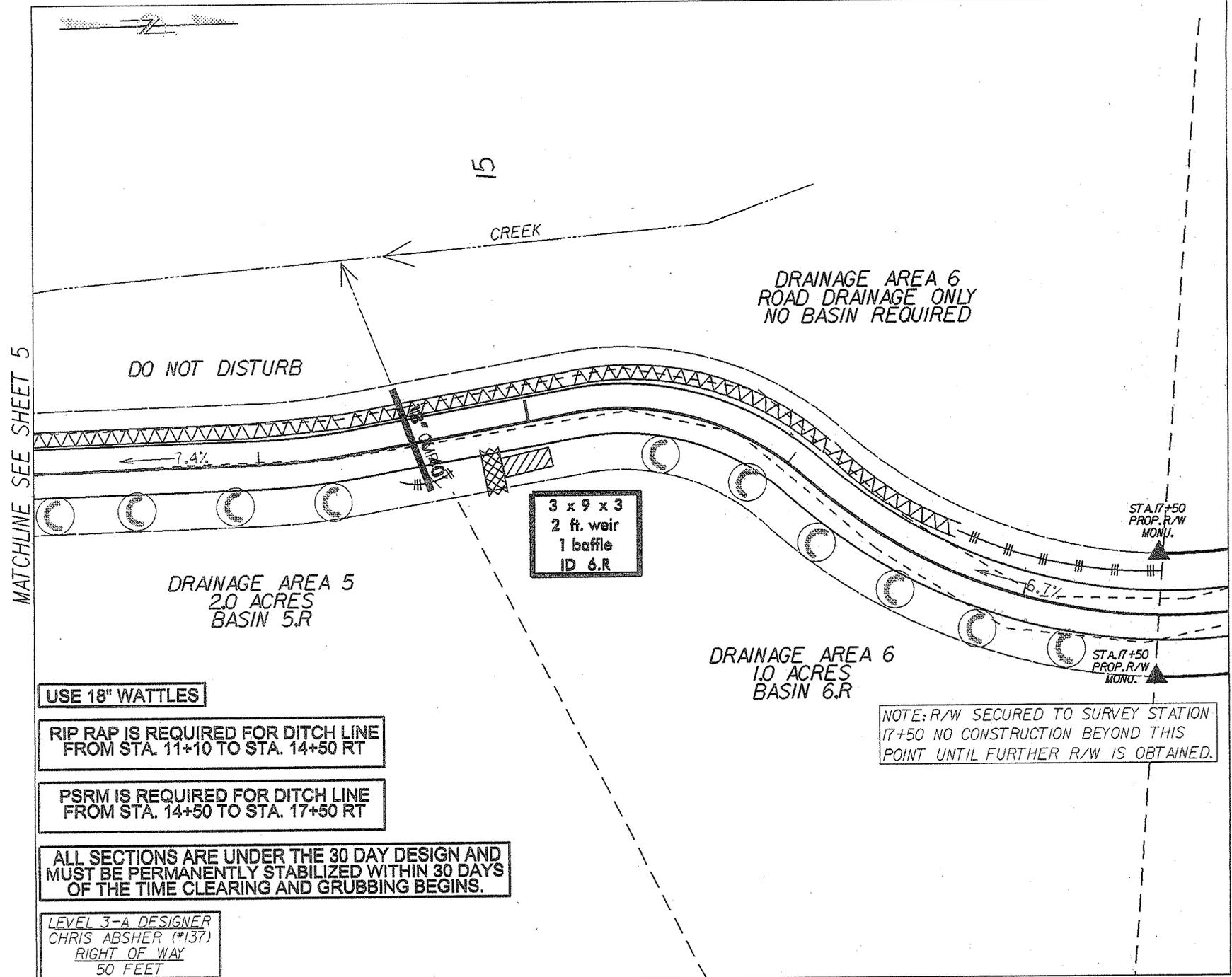
USE 18" WATTLES

DRAINAGE AREA 5
2.0 ACRES
BASIN 5.R

FALSE SLUMP

DO NOT DISTURB

DRAINAGE AREA 6
ROAD DRAINAGE ONLY
NO BASIN REQUIRED



MATCHLINE SEE SHEET 5

DO NOT DISTURB

15

CREEK

DRAINAGE AREA 6
ROAD DRAINAGE ONLY
NO BASIN REQUIRED

DRAINAGE AREA 5
2.0 ACRES
BASIN 5.R

3 x 9 x 3
2 ft. weir
1 baffle
ID 6.R

DRAINAGE AREA 6
1.0 ACRES
BASIN 6.R

STA. 17+50
PROP. R/W
MONU.

STA. 17+50
PROP. R/W
MONU.

USE 18" WATTLES

RIP RAP IS REQUIRED FOR DITCH LINE
FROM STA. 11+10 TO STA. 14+50 RT

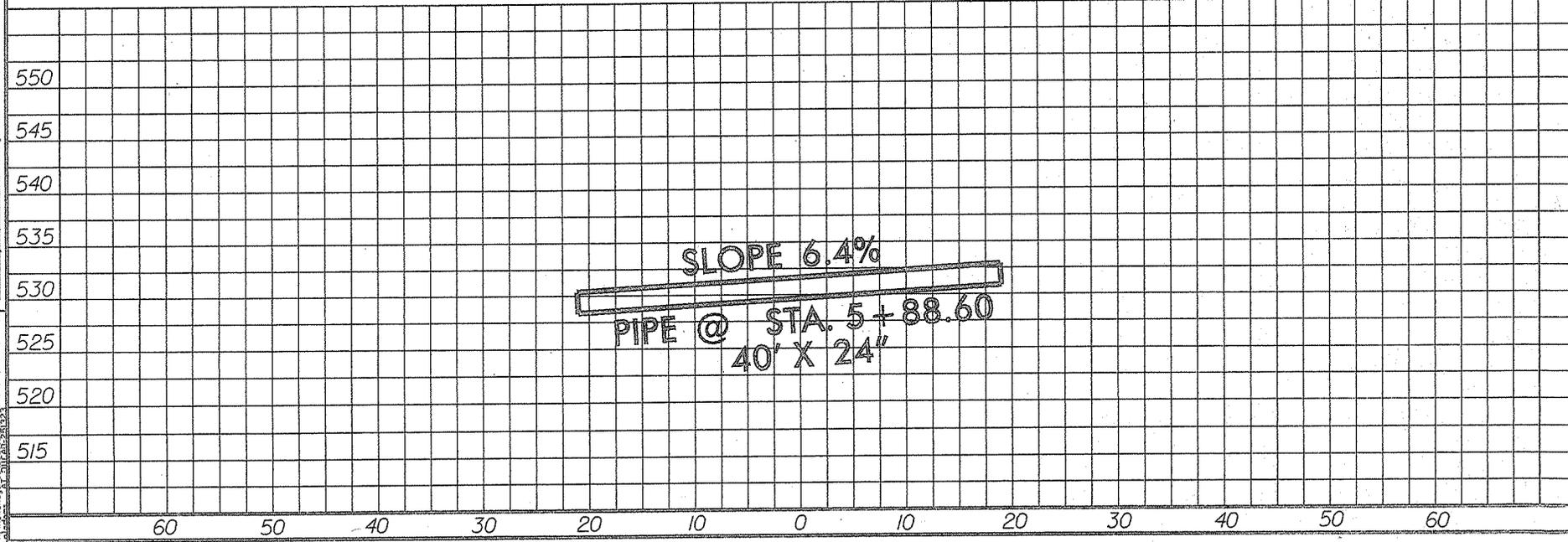
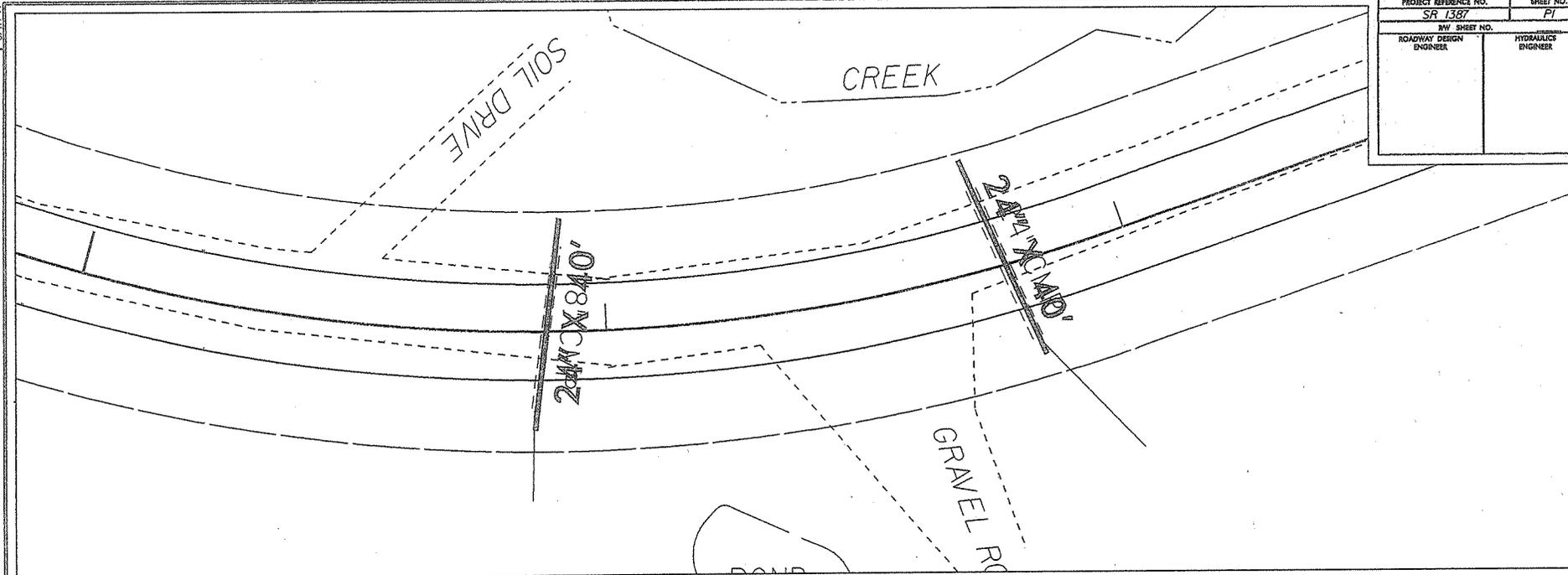
PSRM IS REQUIRED FOR DITCH LINE
FROM STA. 14+50 TO STA. 17+50 RT

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

LEVEL 3-A DESIGNER
CHRIS ABSHER (#137)
RIGHT OF WAY
50 FEET

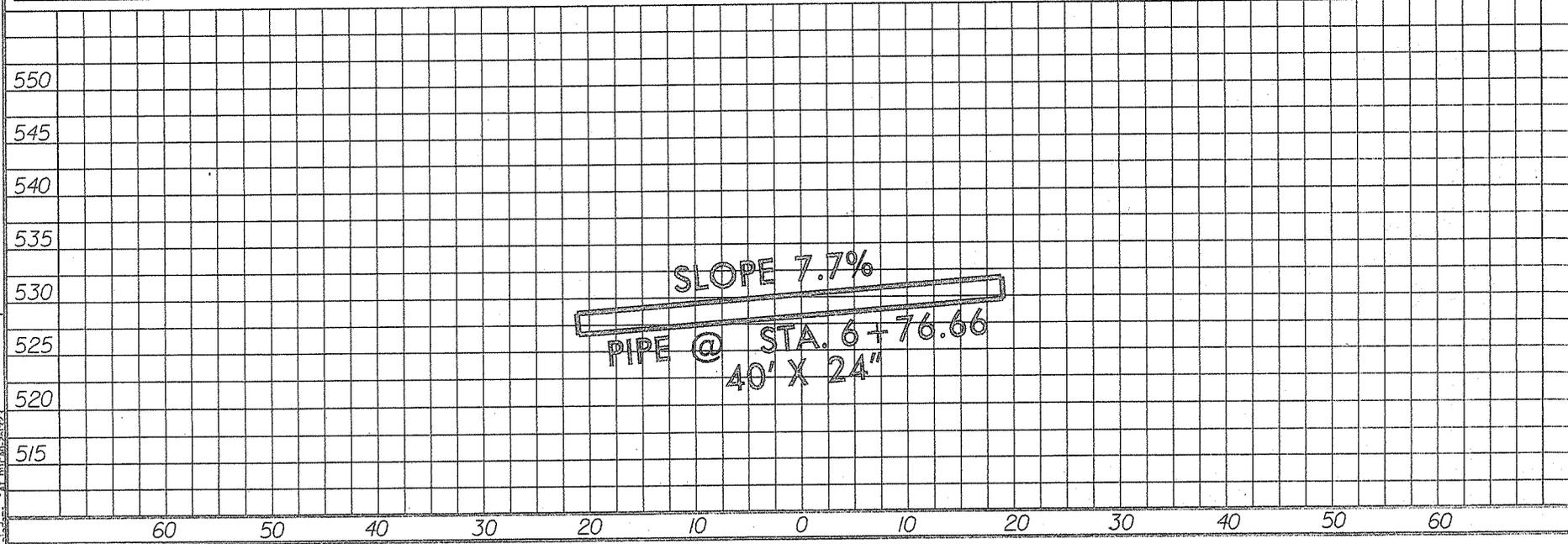
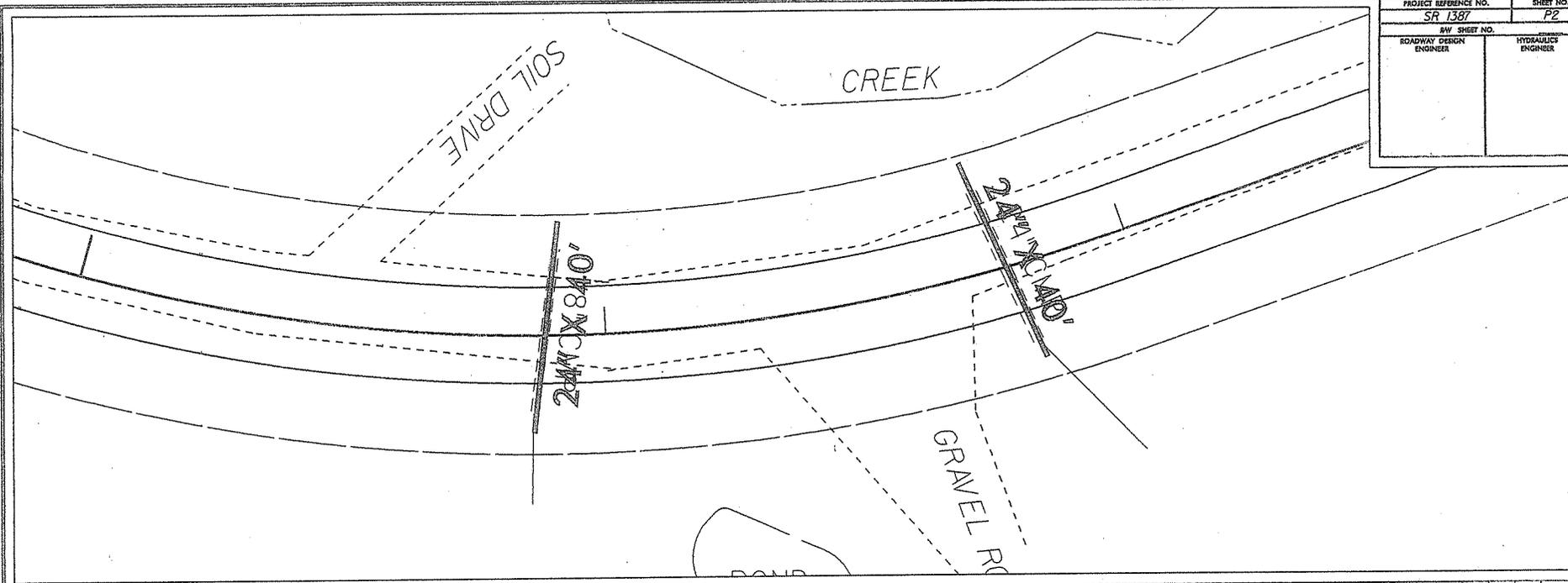
NOTE: R/W SECURED TO SURVEY STATION
17+50 NO CONSTRUCTION BEYOND THIS
POINT UNTIL FURTHER R/W IS OBTAINED.

PROJECT REFERENCE NO. SR 1387	SHEET NO. PI
BW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



8/17/95
 REVISIONS
 PL-11-2015 09:50 21/03/2017 08:44 SR 1387 DP Rob Poca\1387_Hyd_Plan.dwg 3_082413.dwg

PROJECT REFERENCE NO. SR 1387	SHEET NO. P2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



6/17/09
 DIMENSIONS
 8:15:23 8/14 03:13:01 2/20/04 SS: 1387 DR: 0001/0001/1387_Hyd_Plan.dwg 3_0622113.dwg

