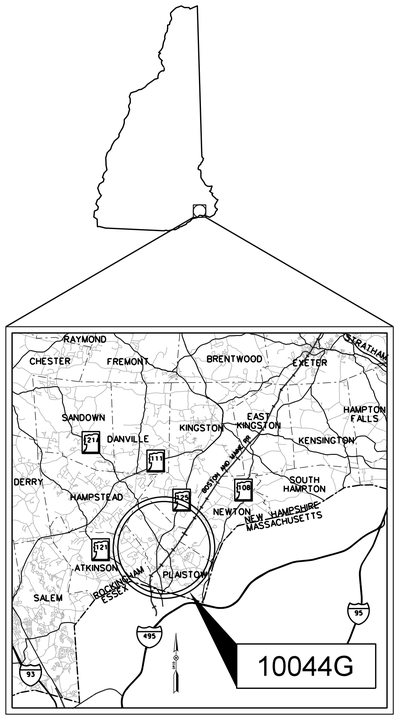
STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLANS
FEDERAL AID PROJECT

X-A000(380)
N.H.PROJECT NO. 10044G
NH ROUTE 125

DESIGN DATA

AVERAGE DAILY TRAFFIC 20 06	24,300
AVERAGE DAILY TRAFFIC 20 24	29,100
PERCENT OF TRUCKS	10%
DESIGN SPEED	45 MPH
LENGTH OF PROJECT	0.96 MILES



LOCATION MAP

GRAPHIC SCALE

STA. 1232+50
END PAVEMENT
REHABILITATION

STA. 1233+00
BEGIN FULL DEPTH
CONSTRUCTION

STA. 1223+25
BEGIN APPROACH
(SKEWED)

STA. 1271+96
END FULL DEPTH CONSTRUCTION

STA. 1271+96 (10044G) =
STA. 1271+96 (10044F)
(BY OTHERS)

STA. 1273+53
END APPROACH

LIMIT OF WORK

B&M RAILROAD
BRIDGE NO. 11/062

NH ROUTE 125

1220 1225 1230 1235 1240 1245 1250 1255 1260 1265 1270 1275 1280 1285

105 110 115 120

200 205 300

EAST RD.
JOANNE DR.
B&M RAILROAD
WESTVILLE RD.
ACCESS RD.
SERVICE RD.
OLD RD.
ROSE AVE.
DANVILLE RD.
JESSE GEORGE RD.
TO HAVERHILL, MA
TO KINGSTON

LIMIT OF WORK

STA. 102+00
LIMIT OF WORK

STA. 304+75
BEGIN APPROACH

STA. 306+50
LIMIT OF WORK
END APPROACH

STA. 1224+25
BEGIN PAVEMENT
REHABILITATION

DRAWN BY	VHB	DATE 2/2015
CHECKED BY	F. KOCZALKA	DATE 8/2015

VHB
Vanasse Hangen Brustlin, Inc.

TOWN OF PLAISTOW
COUNTY OF ROCKINGHAM
SCALE: 1" = 250'

NHDOT THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

RECOMMENDED FOR APPROVAL:

DIRECTOR OF PROJECT DEVELOPMENT — DATE

APPROVED:

ASSISTANT COMMISSIONER AND CHIEF ENGINEER — DATE

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR — DATE

FEDERAL PROJECT NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
X-A000(380)	10044G	1	179

INDEX OF SHEETS

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11-26	SUMMARY OF QUANTITIES
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	CROSS SECTIONS
100-147	NH ROUTE 125
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169-174	OLD ROAD
175-179	BMP # 4

GENERAL NOTES

1. FOR STANDARD PLANS, SEE "STANDARD PLANS FOR ROAD CONSTRUCTION" DATED 2010 (A BOUND BOOK).
2. HIGH TENSION OVERHEAD TRANSMISSION LINES ARE LOCATED THROUGHOUT THE PROJECT WITH CROSSINGS AT VARIOUS LOCATIONS AND RUNNING ALONG THE ROAD THROUGHOUT THE PROJECT EVEN ON REGULAR POLES. THE CONTRACTOR IS ADVISED THAT EXTREME CAUTION WILL BE REQUIRED IN THE OPERATION OF EQUIPMENT, ESPECIALLY CRANES AND PILE DRIVING EQUIPMENT.
3. MODIFY SUPERELEVATION ON EXISTING CURVES BY THE USE OF A LEVELING COURSE TO THE RATES INDICATED ON THE PLANS OR AS ORDERED.
4. EXISTING DELINEATORS AND WITNESS MARKERS THAT ARE REMOVED AND DETERMINED BY THE ENGINEER TO BE IN ACCEPTABLE CONDITION SHALL BE RESET (SUBSIDIARY). ADDITIONAL DELINEATORS AND WITNESS MARKERS ORDERED WILL BE PAID UNDER THE APPROPRIATE ITEMS OF THE CONTRACT.
5. NO EXISTING MONUMENTS, BOUNDS, OR BENCHMARKS SHALL BE DISTURBED WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
6. PERFORM ALL WORK WITHIN THE EXISTING RIGHT-OF-WAY, UNLESS OTHERWISE SHOWN ON THE PLANS OR AS ORDERED BY THE ENGINEER.
7. REMOVE UNPROTECTED PROJECT MARKERS (SUBSIDIARY).
8. SURVEY DATA FOR THIS PROJECT WAS COLLECTED BY SDR AND THE FIELD NOTES CAN BE FOUND IN THE FIELD BOOK(S) 11554, 12567, 12603, 12707, 12894, 12990, 13064, 13208 AND 13319. COORDINATES ARE NEW HAMPSHIRE STATE PLANE COORDINATES OF NAD83, 1986 ADJUSTMENT AND THE BEARINGS ARE GRID. ELEVATIONS ARE REFERENCED TO NGVD 1929.
9. QUANTITIES FOR EMBANKMENT AND EXCAVATION FOR SLOPE ROUNDINGS AS SHOWN ON THE TYPICALS HAVE NOT BEEN CALCULATED AND ARE NOT INCLUDED IN THE QUANTITY SUMMARIES, AND ARE CONSIDERED SUBSIDIARY TO THE APPROPRIATE 203 ITEMS.
10. SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION

THE FOLLOWING GENERAL NOTES WILL BE USED ON THIS PROJECT:

1	2		4	5	6		8	9			

REVISION DATE 11/21/14

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

INDEX OF SHEETS AND GENERAL NOTES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
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GENERAL

EDGE OF PAVEMENT — PROPOSED ROADWAY
TRAVELED WAY — existing roadway
(pavement removed outside slope lines)

DRIVEWAYS — (label surface type)

BUILDINGS — (building to be removed)
(label house or type of building)

FOUNDATION — (label type)

LEACH FIELD — leach field

BRIDGE CROSSINGS — STREAM, OVERPASS

STEPS AND WALK — (label type)

INTERMITTENT WATER COURSE

SHORE LINE — river/stream, pond (label name of water body)

POTENTIAL WET AREA SYMBOL

BRUSH OR WOODS LINE

TREES (PLANS) — (deciduous) (coniferous) (stump)
(show station, circumference in feet & type)

TREE OR STUMP (CROSS-SECTIONS)

HEDGE — (label type)

MONITORING WELL — mon

WELL

FLAG POLE — fp

ORIGINAL GROUND (TYPICALS)

ROCK OUTCROP

ROCK LINE (TYPICALS & SECTIONS ONLY)

GUARDRAIL (label type) — existing: bgr, cgr; PROPOSED

JERSEY BARRIER

CURB (LABEL TYPE)

STONE WALL

RETAINING WALL (LABEL TYPE) — (points toward retained ground)

FENCE (LABEL TYPE)

SIGNS — (single post), (double post)

GAS PUMP — gp

FUEL TANK (ABOVE GROUND) — ft (label size & type)

STORAGE TANK FILLER CAP — fc

SEPTIC TANK — S

GRAVE — gr

MAILBOX — mb

VENT PIPE — vp

SATELLITE DISH ANTENNA — da

PHONE — ph

GROUND LIGHT/LAMP POST — gl, lp

BORING LOCATION — B

TEST PIT — TP

INTERSTATE NUMBERED HIGHWAY — 293

UNITED STATES NUMBERED HIGHWAY — 3

STATE NUMBERED HIGHWAY — 102

SHORELAND - WETLAND

WETLAND DESIGNATION AND TYPE — 2 PUB2E

DELINEATED WETLAND — DW
ORDINARY HIGH WATER — OHW
TOP OF BANK — TOB
TOP OF BANK & ORDINARY HIGH WATER — TOBOHW
NORMAL HIGH WATER
WIDTH AT BANK FULL
PRIME WETLAND — PWET
PRIME WETLAND 100' BUFFER
NON-JURISDICTIONAL DRAINAGE AREA
COWARDIN DISTINCTION LINE
TIDAL BUFFER ZONE — TBZ
DEVELOPED TIDAL BUFFER ZONE
HIGHEST OBSERVABLE TIDE LINE — HOTL
MEAN HIGH WATER
MEAN LOW WATER
VERNAL POOL — VP
SPECIAL AQUATIC SITE — SAS
REFERENCE LINE — REF
WATER FRONT BUFFER — WB50
NATURAL WOODLAND BUFFER — NWB150
PROTECTED SHORELAND — PS250
INVASIVE SPECIES LABEL — I.S. I, I.S. II
INVASIVE SPECIES — INV

FLOODPLAIN / FLOODWAY

500 YEAR FLOODPLAIN BOUNDARY — FP500
100 YEAR FLOODPLAIN BOUNDARY — FP100
FLOODWAY — FW

ENGINEERING

CONSTRUCTION BASELINE — 30, 31, 32

PC, PT, POT (ON CONST BASELINE)

PI (IN CONSTRUCTION BASELINES)

INTERSECTION OR EQUATION OF TWO LINES

ORIGINAL GROUND LINE (PROFILES AND CROSS-SECTIONS)

PROFILE GRADE LINE (PROFILES AND CROSS-SECTIONS)

CLEARING LINE — SLOPE LINE, CLEARING LINE

SLOPE LINE

SLOPE LINE (FILL)

SLOPE LINE (CUT)

PROFILES AND CROSS SECTIONS:
ORIGINAL GROUND ELEVATION (LEFT) — 72.5
FINISHED GRADE ELEVATION (RIGHT) — 79.14

SHEET 1 OF 2

REVISION DATE 11/21/14		STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN			
VHB Vanasse Hangen Brustlin, Inc.		STANDARD SYMBOLS			
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DRAINAGE

MANHOLE
CATCH BASIN — cb
DROP INLET — di
(existing) (PROPOSED)

DRAINAGE PIPE (existing)
DRAINAGE PIPE (PROPOSED)
(label size & type)

UNDERDRAIN (existing) W/ FLUSHING BASIN
UNDERDRAIN (PROPOSED) W/ FLUSHING BASIN
show direction of flow
fb
(label size & type)

HEADER (existing & PROPOSED)
(with stone outlet protection)

END SECTION (existing & PROPOSED)
METAL or PLASTIC
RCP

OPEN DITCH (PROPOSED)

EROSION CONTROL/ STONE SLOPE PROTECTION

BOUNDARIES / RIGHT-OF-WAY

RIGHT-OF-WAY LINE (label type)
RR RIGHT-OF-WAY LINE
PROPERTY LINE
PROPERTY LINE (COMMON OWNER) — Z
TOWN LINE — BOW / CONCORD
COUNTY LINE — COOS / GRAFTON
STATE LINE — MAINE / NEW HAMPSHIRE
NATIONAL FOREST
CONSERVATION LAND
BENCH MARK / SURVEY DISK
BOUND — bnd (PROPOSED)
STATE LINE/ TOWN LINE MONUMENT — S/L T/L
NHDOT PROJECT MARKER
IRON PIPE OR PIN — ip
DRILL HOLE IN ROCK — dh
TAX MAP AND LOT NUMBER — 156 / 14 — 1642/341 — 6.80 Ac.±
PROPERTY PARCEL NUMBER — 12
HISTORIC PROPERTY — H

UTILITIES

existing PROPOSED

TELEPHONE POLE
POWER POLE
JOINT OCCUPANCY
MISCELLANEOUS/UNKNOWN POLE
GUY POLE OR PUSH BRACE
(plot point at face not center of symbol)

LIGHT POLE
LIGHT ON POWER POLE
LIGHT ON JOINT POLE

POLE STATUS:
REMOVE, LEAVE, PROPOSED, OR TEMPORARY AS APPLICABLE e.g.:
R L P+04 25.0' T+04 25.0'

RAILROAD — (label ownership)
RAILROAD SIGN
RAILROAD SIGNAL
UTILITY JUNCTION BOX — jb JB
OVERHEAD ELECTRIC — OE

UNDERGROUND UTILITIES

WATER (on existing lines label size, type and note if abandoned) — W PW
SEWER — S PS
TELEPHONE — T PT
ELECTRIC — E PE
GAS — G PG
LIGHTING — L PL
INTELLIGENT TRANSPORTATION SYSTEM — ITS PITS
FIBER OPTIC — FO PFO
WATER SHUT OFF — WSO
GAS SHUT OFF — GSO
HYDRANT — HYD

MANHOLES
SEWER — S — MHS
TELEPHONE — t — MHT
ELECTRICAL — e — MHE
GAS — g — MHG
UNKNOWN — u

TRAFFIC SIGNALS / ITS

existing PROPOSED

MAST ARM (existing) — 30' MA (NOTE ANGLE FROM ℄)
OPTICOM RECEIVER
OPTICOM STROBE
TRAFFIC SIGNAL
PEDESTAL WITH PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON UNIT
SIGNAL CONDUIT — C — PC
CONTROLLER CABINET — cc CC
METER PEDESTAL — mp MP
PULL BOX — pb PB
LOOP DETECTOR (QUADRUPOLE) — (label size)
LOOP DETECTOR (RECTANGULAR) — (label size)
CAMERA POLE (CCTV)
FIBER OPTIC DELINEATOR — fod FOD
FIBER OPTIC SPLICE VAULT — SVF
ITS EQUIPMENT CABINET — its ITS
VARIABLE SPEED LIMIT SIGN
DYNAMIC MESSAGE SIGN
ROAD AND WEATHER INFO SYSTEM

CONSTRUCTION NOTES

CURB MARK NUMBER - BITUMINOUS — B-1
CURB MARK NUMBER - GRANITE — G-1
CLEARING AND GRUBBING AREA — A
DRAINAGE NOTE — 1
EROSION CONTROL NOTE — A
FENCING NOTE — A
GUARDRAIL NOTE — 1
ITS NOTE — 1
LIGHTING NOTE — A
TRAFFIC SIGNAL NOTE — 1

SHEET 2 OF 2

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

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STANDARD SYMBOLS

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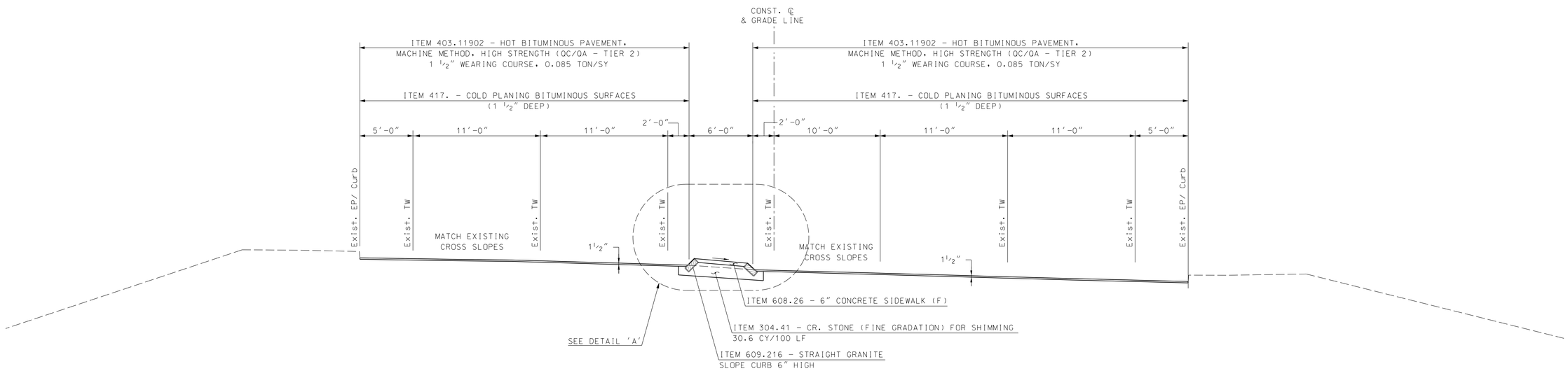
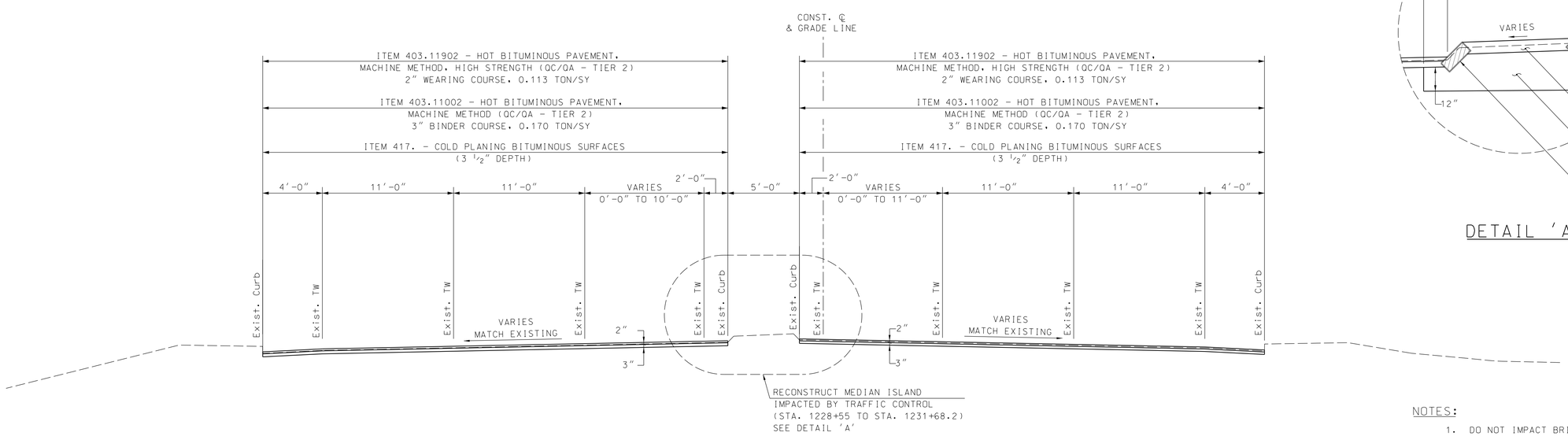
TYPICAL SECTIONS OF IMPROVEMENT

NOT TO SCALE



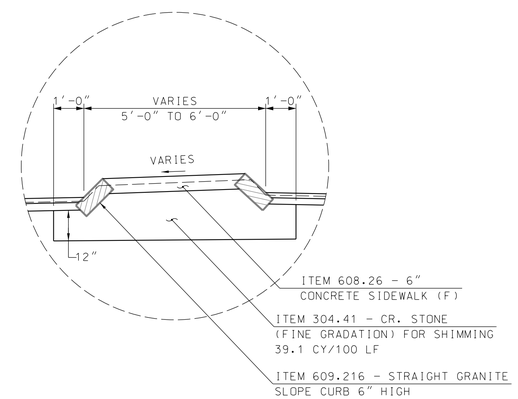
COLD PLANE & OVERLAY SECTION

STA. 1271+96 - STA. 1273+53



PAVEMENT REHABILITATION SECTION

STA. 1223+07 - STA. 1232+50



DETAIL 'A'

NOTES:

1. DO NOT IMPACT BRIDGE OR BRIDGE JOINT FOR NH ROUTE 125 BRIDGE OVER THE B&M RAILROAD.
2. ITEM 403.6 - PAVEMENT JOINT ADHESIVE SHALL BE APPLIED TO ALL LONGITUDINAL JOINTS ON PAVEMENT COURSES.

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED VHB TEAM	DATE 7/2009	
NEW DESIGN F. KOCZALKA	DATE 9/2014	
SHEET CHECKED A. GRANDE	DATE 8/2015	
AS BUILT DETAILS	DATE	

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

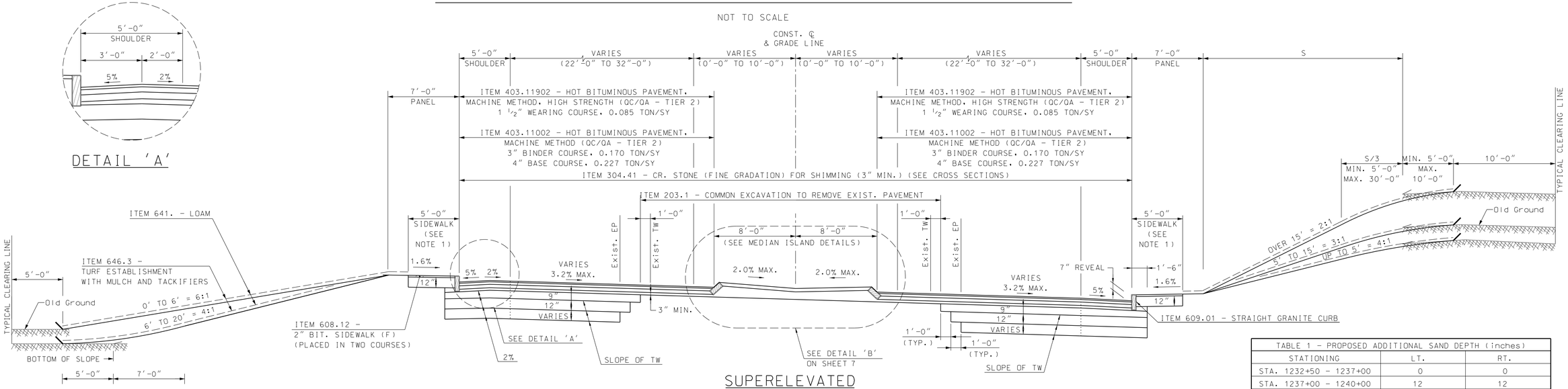
TYPICAL SECTIONS OF IMPROVEMENT
NH ROUTE 125

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTY1	10044G	5	179

TYPICAL SECTIONS OF IMPROVEMENT

NOT TO SCALE

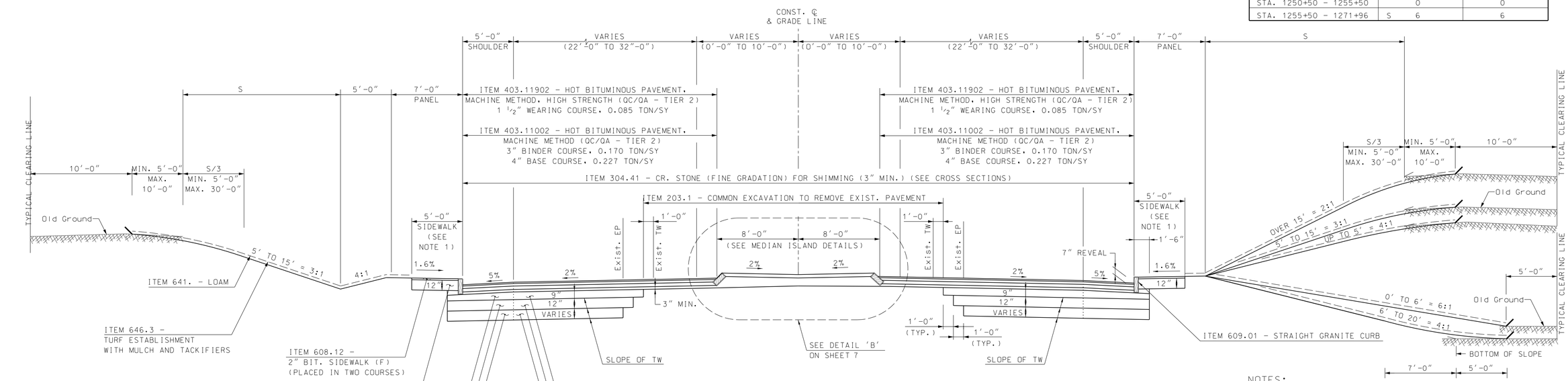
DETAIL 'A'



SUPERELEVATED

STA. 1269+99 - STA. 1271+96

TABLE 1 - PROPOSED ADDITIONAL SAND DEPTH (inches)		
STATIONING	LT.	RT.
STA. 1232+50 - 1237+00	0	0
STA. 1237+00 - 1240+00	12	12
STA. 1240+00 - 1242+50	24	18
STA. 1242+50 - 1246+50	0	0
STA. 1246+50 - 1250+50	12	6
STA. 1250+50 - 1255+50	0	0
STA. 1255+50 - 1271+96	S 6	6



NORMAL CROWN

STA. 1232+50 - STA. 1269+99

NOTES:

1. SIDEWALK WILL BE 7'-0" WIDE IN AREAS OF MAILBOX INSTALLATION. SEE MAILBOX DETAIL ON SHEET 28.
2. ITEM 403.6 - PAVEMENT JOINT ADHESIVE SHALL BE APPLIED TO ALL LONGITUDINAL JOINTS ON PAVEMENT COURSES.
3. PROVIDE ADDITIONAL SAND WHERE REQUIRED TO MATCH THE BOTTOM OF THE EXISTING GRAVEL LAYER. SEE TABLE 1.

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STATE OF NEW HAMPSHIRE

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TYPICAL SECTIONS OF IMPROVEMENT
NH ROUTE 125

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
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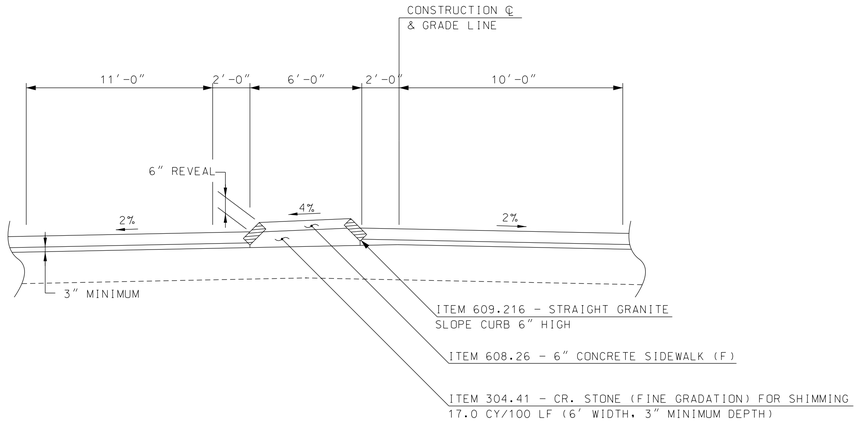
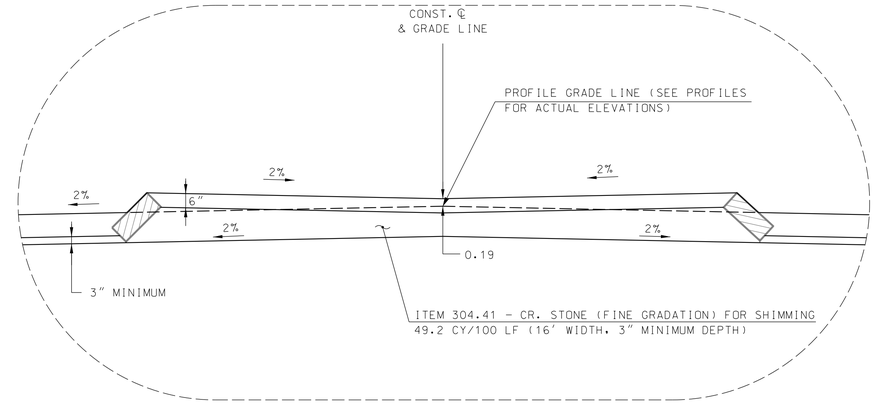


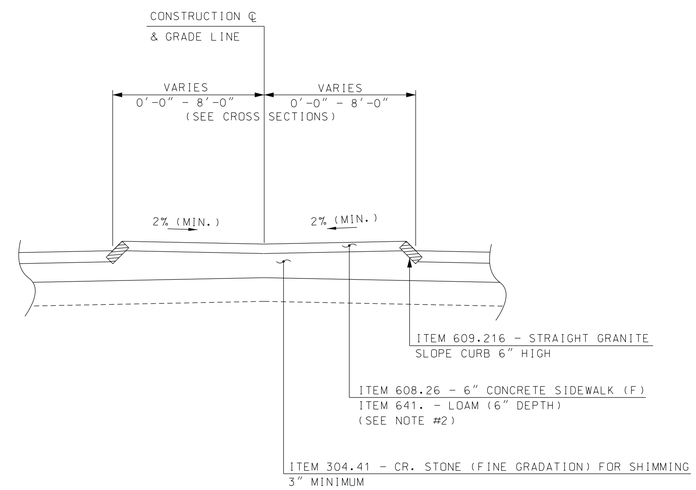
6' MEDIAN ISLAND SECTION, LEFT

STA. 1248+85 - 1253+00
✳ STA. 1270+65 - 1273+53 (SUPERELEVATED)
NOT TO SCALE

✳ SEE CROSS SECTIONS FOR SUPERELEVATION



DETAIL 'B'

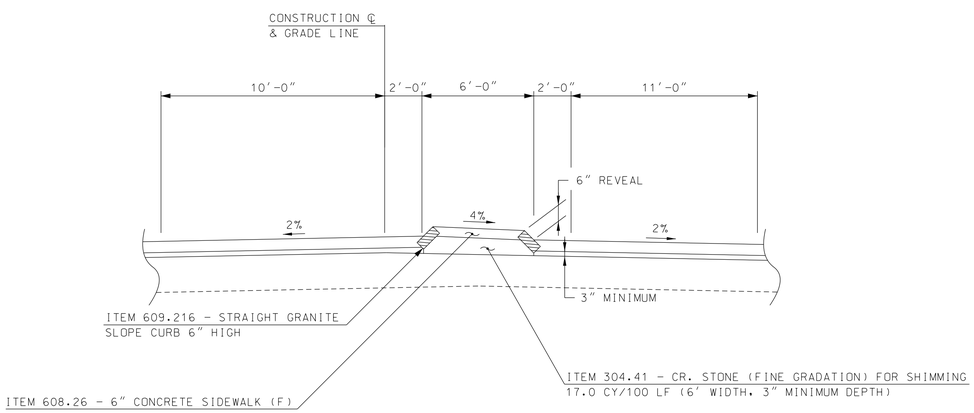


LANDSCAPED MEDIAN ISLAND

STA. 1234+64 - 1248+15
STA. 1257+85 - 1270+25
NOT TO SCALE

CONCRETE MEDIAN ISLAND

STA. 1234+35 - 1234+64
STA. 1248+15 - 1248+85
STA. 1257+55 - 1257+85
STA. 1270+25 - 1270+65
NOT TO SCALE



6' MEDIAN ISLAND SECTION, RIGHT

STA. 1232+75 - 1234+35
STA. 1254+10 - 1257+55
NOT TO SCALE

NOTE:

1. MEDIAN ISLANDS 6' OR LESS IN WIDTH ARE GRADED STRAIGHT ACROSS. MEDIAN ISLANDS GREATER THAN 6' IN WIDTH ARE DEPRESSED.
2. MEDIAN ISLANDS 10' OR LESS IN WIDTH WILL BE CONCRETE. MEDIAN ISLANDS GREATER THAN 10' IN WIDTH WILL BE LANDSCAPED.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

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SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

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STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

TYPICAL SECTIONS OF IMPROVEMENT
NH ROUTE 125

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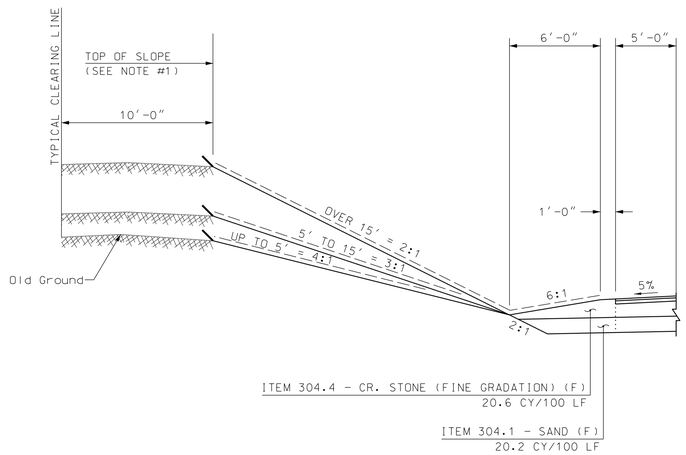
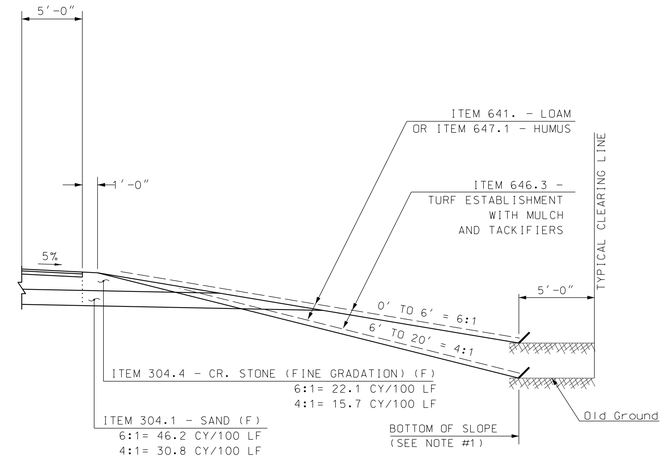
TYPICAL SECTIONS OF IMPROVEMENT

NOT TO SCALE



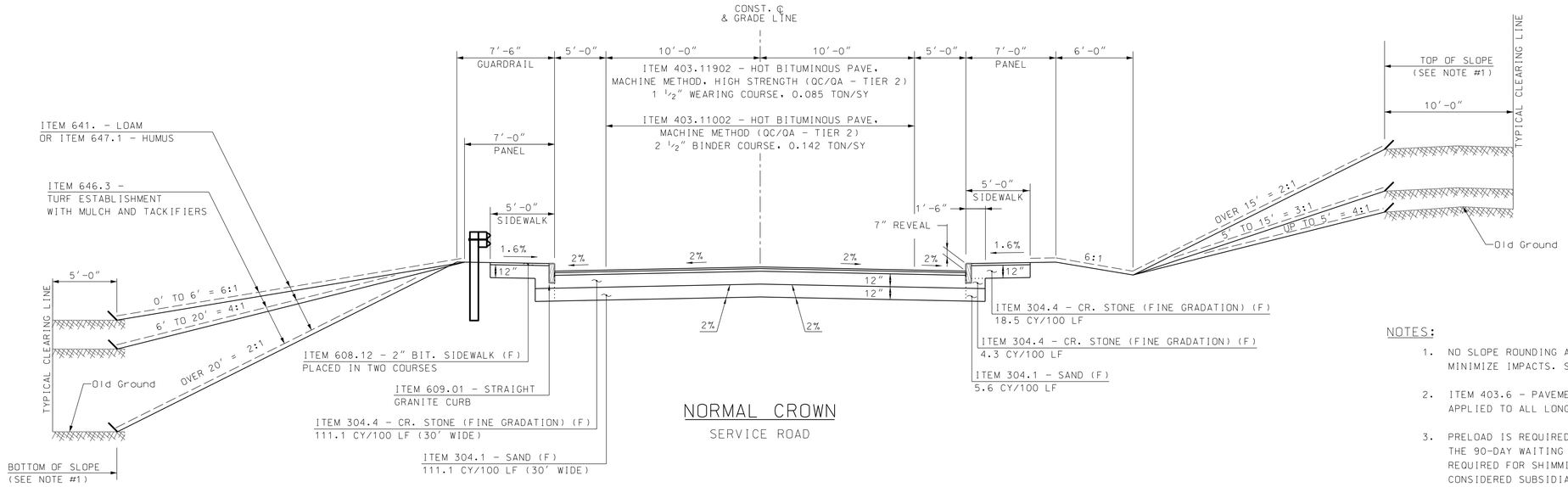
UNCURBED DITCH DETAIL

STA. 102+75 - STA. 103+75, LT
STA. 104+75 - STA. 106+75, LT



UNCURBED FILL DETAIL

STA. 102+75 - STA. 105+50, RT
STA. 103+75 - STA. 104+75, LT



NORMAL CROWN

SERVICE ROAD

NOTES:

1. NO SLOPE ROUNDING ALONG SERVICE ROAD IN ORDER TO MINIMIZE IMPACTS. SEE CROSS SECTIONS FOR SLOPE LIMITS.
2. ITEM 403.6 - PAVEMENT JOINT ADHESIVE SHALL BE APPLIED TO ALL LONGITUDINAL JOINTS ON PAVEMENT COURSES.
3. PRELOAD IS REQUIRED FROM STA. 103+00 TO 116+00. AFTER THE 90-DAY WAITING PERIOD, ANY ADDITIONAL MATERIAL REQUIRED FOR SHIMMING AREAS THAT HAVE SETTLED SHALL BE CONSIDERED SUBSIDIARY TO OTHER CONTRACT ITEMS, EMBANKMENT-IN-PLACE AND CRUSHED STONE (FINE GRADATION).

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

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TYPICAL SECTIONS OF IMPROVEMENT
SERVICE ROAD

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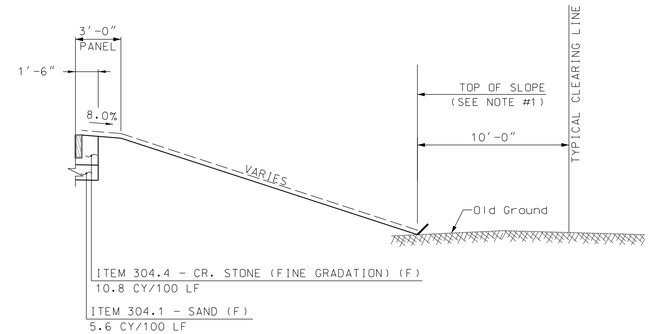
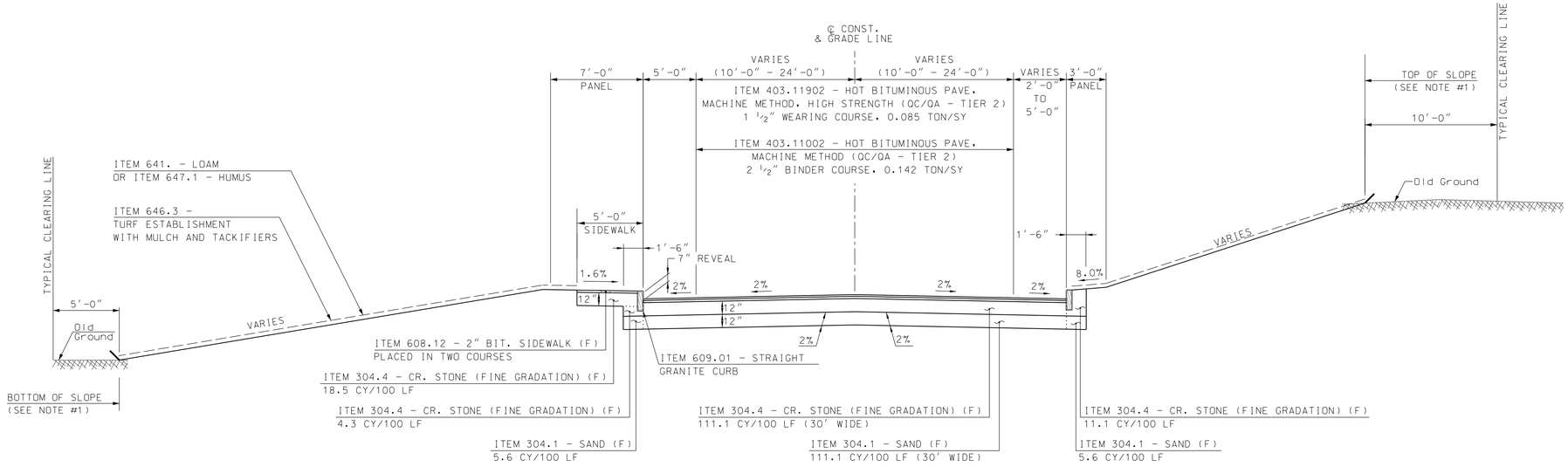
TYPICAL SECTIONS OF IMPROVEMENT

NOT TO SCALE



FILL SLOPE DETAIL

STA. 201+27 - STA. 202+62, RT.



NORMAL CROWN

ACCESS ROAD

NOTES:

1. NO SLOPE ROUNDING ALONG ACCESS ROAD IN ORDER TO MINIMIZE IMPACTS. SEE CROSS SECTIONS FOR SLOPE LIMITS.
2. ITEM 403.6 - PAVEMENT JOINT ADHESIVE SHALL BE APPLIED TO ALL LONGITUDINAL JOINTS ON PAVEMENT COURSES.

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

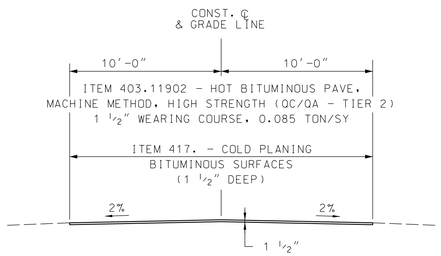
VHB Vanasse Hangen Brustlin, Inc.

TYPICAL SECTIONS OF IMPROVEMENT
ACCESS ROAD

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTY2	10044G	9	179

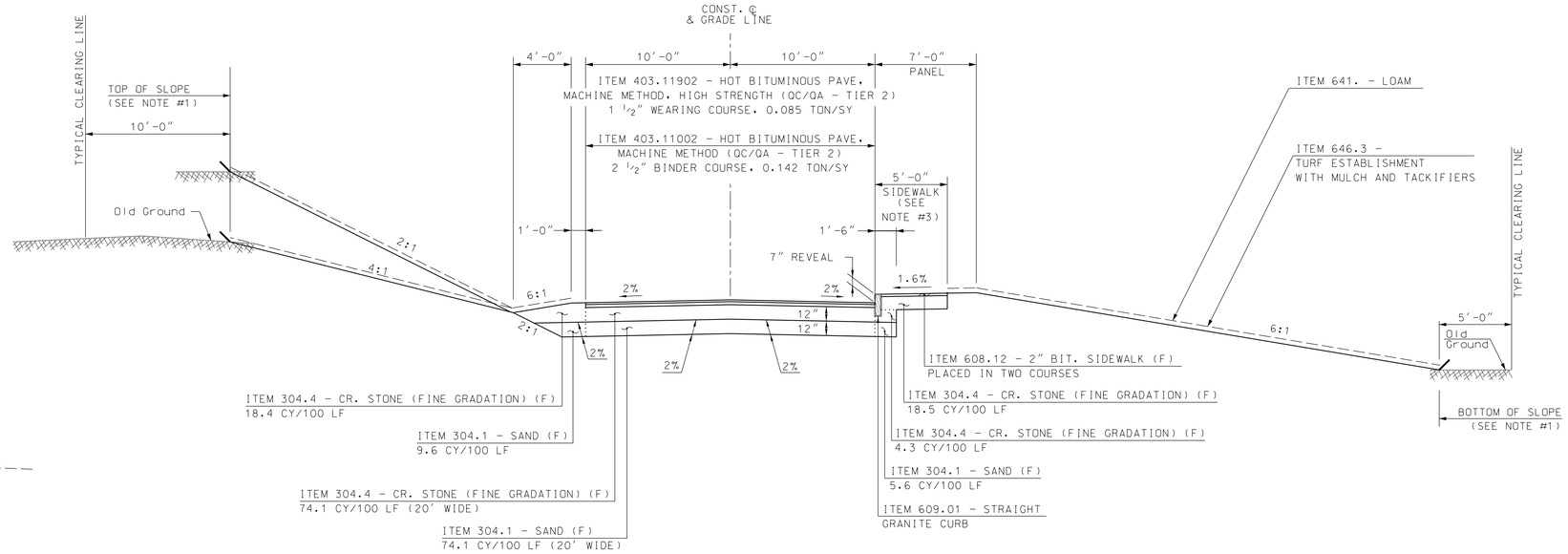
TYPICAL SECTIONS OF IMPROVEMENT

NOT TO SCALE



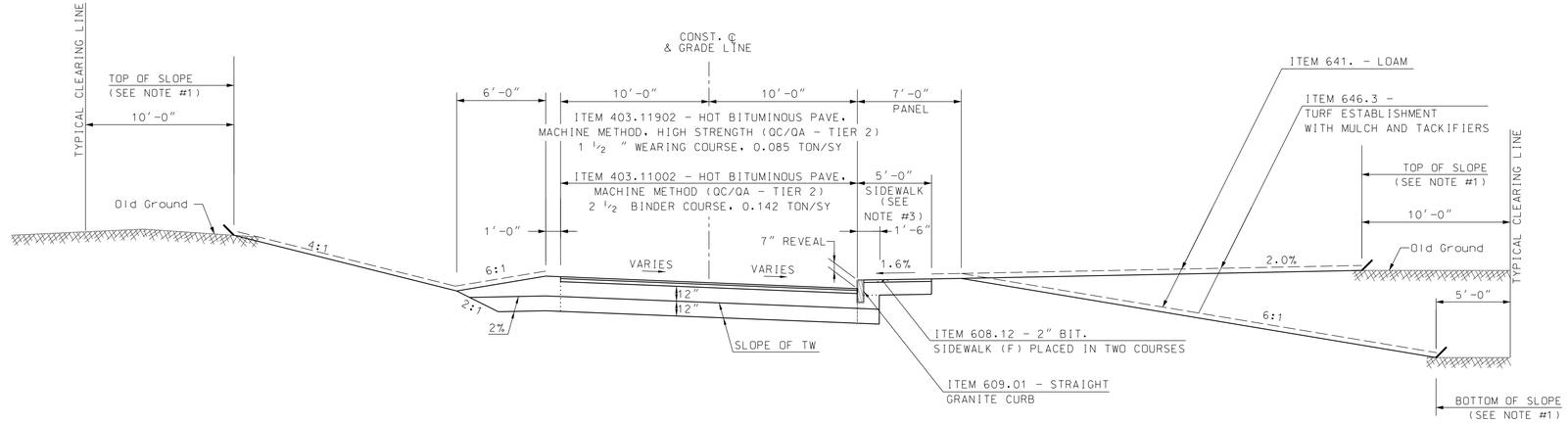
COLD PLANE & OVERLAY SECTION

STA. 304+75 - STA. 306+50



NORMAL CROWN

STA. 300+80 - STA. 304+75



SUPERELEVATED SECTION

STA. 300+00 - STA. 300+80

NOTES:

1. NO SLOPE ROUNDING ALONG OLD ROAD IN ORDER TO MINIMIZE IMPACTS. SEE CROSS SECTIONS FOR SLOPE LIMITS.
2. ITEM 403.6 - PAVEMENT JOINT ADHESIVE SHALL BE APPLIED TO ALL LONGITUDINAL JOINTS ON PAVEMENT COURSES.
3. STA. 300+50 TO 301+50. 1.6% SLOPE FOR SIDEWALK SLOPES AWAY FROM ROADWAY. (SEE CROSS SECTIONS)

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED VHB TEAM	DATE 7/2009	
NEW DESIGN F. KOCZALKA	DATE 9/2014	
SHEET CHECKED A. GRANDE	DATE 8/2015	
AS BUILT DETAILS	DATE	

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

TYPICAL SECTIONS OF IMPROVEMENT
OLD ROAD

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTY2	10044G	10	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

CURBING

ITEM NO.			609.01	609.02	609.216	609.226	609.5	609.936
ITEM		RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB	STRAIGHT GRANITE SLOPE CURB 6" HIGH	STRAIGHT GRANITE SLOPE CURB WITH RADIAL JOINTS, 6" HIGH	RESET GRANITE CURB	SPECIAL STRAIGHT GRANITE CURB (REVEAL 18" TO 24")
UNIT		FT	LF	LF	LF	LF	LF	LF
LOCATION	REF #							
CURBING PLAN 2								
NH ROUTE 125								
STA. 1231+63.7, 37.4' LT - STA. 1231+79, 45.0' LT	G-01	40	17.3					
NOT USED	G-02							
STA. 1231+79.0, 45.0' LT - STA. 1231+97.5, 69.9' LT	G-03	50	31.3					
NOT USED	G-04							
STA. 1232+46.7, 69.9' LT - STA. 1232+61.9, 46.3' LT	G-05	38	28.8					
NOT USED	G-06							
STA. 1232+61.9, 46.3' LT - STA. 1232+90.9, 37.0' LT	G-07	50	31.0					
NOT USED	G-08							
STA. 1232+90.9, 37.0' LT - STA. 1233+52.4, 37.0' LT	G-09		61.5					
STA. 1232+61.5, 111.8' LT - STA. 1232+63.8, 109.7' LT	G-10		3.1					
STA. 1232+63.8, 109.7' LT - STA. 1232+72.3, 94.1' LT	G-11	25	18.2					
STA. 1232+72.3, 94.1' LT - STA. 1232+74.1, 81.6' LT	G-12		12.6					
STA. 1232+74.1, 81.6' LT - STA. 1232+82.9, 47.0' LT	G-13		35.7					
STA. 1232+82.9, 47.0' LT - STA. 1233+52.4, 47.0' LT	G-14		69.6					
STA. 1233+52.4, 47.0' LT - STA. 1233+52.4, 42.0' LT	G-15	5		7.9				
STA. 1233+89.4, 37.0' LT - STA. 1234+92.0, 37.0' LT	G-16		102.5					
STA. 1235+19.5, 37.0' LT - STA. 1236+00.0, 37.0' LT	G-17		80.5					
STA. 1235+42.3, 47.0' LT - STA. 1236+00.0, 47.0' LT	G-18		57.7					
STA. 1236+00.0, 47.0' LT - STA. 1236+00.0, 42.0' LT	G-19	5		7.9				
STA. 1236+26.2, 37.0' LT - STA. 1236+88.1, 37.0' LT	G-20		61.9					
STA. 1236+83.1, 47.0' LT - STA. 1236+88.1, 47.0' LT	G-21		5.0					
STA. 1236+88.1, 47.0' LT - STA. 1236+88.1, 44.0' LT	G-22	5		5.7				
STA. 1237+26.0, 37.0' LT - STA. 1237+66.5, 37.0' LT	G-23	8237	40.7					
STA. 1237+47.3, 47.0' LT - STA. 1237+66.5, 47.0' LT	G-24		19.3					
STA. 1237+66.5, 47.0' LT - STA. 1237+66.5, 42.0' LT	G-25	5		7.9				
STA. 1237+91.6, 37.0' LT - STA. 1238+50.2, 37.0' LT	G-26	8237	58.9					
STA. 1238+75.0, 37.0' LT - STA. 1239+39.8, 37.0' LT	G-27	8237	65.2					
STA. 1239+63.1, 37.0' LT - STA. 1240+58.0, 37.0' LT	G-28	8237	95.4					
STA. 1231+63.0, 35.3' RT - STA. 1231+67.0, 35.4' RT	G-29		4.0					
STA. 1231+67.0, 35.4' RT - STA. 1231+95.1, 48.9' RT	G-30	38	32.2					
NOT USED	G-31							
STA. 1231+95.1, 48.9' RT - STA. 1232+00.5, 59.2' RT	G-32	27	11.8					
STA. 1232+43.7, 59.7' RT - STA. 1232+45.1, 50.4' RT	G-33		9.4					
STA. 1232+45.1, 50.4' RT - STA. 1232+60.9, 37.0' RT	G-34	16		22.6				
STA. 1232+60.9, 37.0' RT - STA. 1233+21.7, 37.0' RT	G-35		60.8					
NOT USED	G-36							
STA. 1233+78.7, 37.0' RT - STA. 1235+42.7, 37.0' RT	G-37		163.9					
STA. 1235+89.3, 37.0' RT - STA. 1236+25.2, 37.0' RT	G-38		35.9					
STA. 1236+49.2, 37.0' RT - STA. 1237+07.1, 37.0' LT	G-39		58.0					
STA. 1237+07.1, 37.0' LT - STA. 1238+24.5, 37.0' RT	G-40	8163	116.9					
STA. 1238+02.7, 56.4' RT - STA. 1238+24.4, 56.4' RT	G-41		21.6					
STA. 1238+24.4, 56.4' RT - STA. 1238+24.4, 42.0' RT	G-42	9.7		20.2				
STA. 1238+78.8, 56.3' RT - STA. 1238+82.5, 44.0' RT	G-43	25	13.0					
STA. 1238+85.8, 56.3' RT - STA. 1239+10.2, 56.1' RT	G-44		24.2					
STA. 1238+88.9, 37.0' RT - STA. 1239+63.0, 37.0' RT	G-45	8163	73.7					
STA. 1239+68.0, 42.0' RT - STA. 1239+72.6, 52.1' RT	G-46	25	11.1					
STA. 1239+99.4, 52.1' RT - STA. 1239+99.6, 51.0' RT	G-47		1.1					
STA. 1239+99.6, 51.0' RT - STA. 1240+03.9, 42.0' RT	G-48	25	7.7					
STA. 1240+09.0, 37.0' RT - STA. 1240+58.0, 37.0' RT	G-49	8163	48.8					
STA. 1228+55.3, 7.2' LT - STA. 1231+65.9, 7.6' LT	G-50				310.6			
	SUBTOTAL A		**1590.3**	**72.2**	**310.6**	**0.0**	**0.0**	**0.0**

CURBING

ITEM NO.			609.01	609.02	609.216	609.226	609.5	609.936
ITEM		RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB	STRAIGHT GRANITE SLOPE CURB 6" HIGH	STRAIGHT GRANITE SLOPE CURB WITH RADIAL JOINTS, 6" HIGH	RESET GRANITE CURB	SPECIAL STRAIGHT GRANITE CURB (REVEAL 18" TO 24")
UNIT		FT	LF	LF	LF	LF	LF	LF
LOCATION	REF #							
CURBING PLAN 2 (CONTINUED)								
NH ROUTE 125								
STA. 1228+55.3, 2.7' LT - STA. 1231+65.9, 3.0' LT	G-51				310.7			
STA. 1231+65.9, 3.0' LT - STA. 1231+65.9, 7.6' LT	G-52	2.3				7.2		
STA. 1232+78.1, 2.0' RT - STA. 1232+78.1, 8.0' RT	G-53	3				9.4		
STA. 1232+78.1, 2.0' RT - STA. 1234+35.0, 2.0' RT	G-54				156.9			
STA. 1232+78.1, 8.0' RT - STA. 1237+07.1, 8.0' RT	G-55				429.0			
STA. 1234+35.0, 2.0' RT - STA. 1235+10.0, 8.0' LT	G-56				75.7			
STA. 1235+10.0, 8.0' LT - STA. 1237+07.1, 8.0' LT	G-57				197.1			
STA. 1237+07.1, 8.0' LT - STA. 1240+58.0, 8.0' LT	G-58	8208			351.2			
STA. 1237+07.1, 8.0' RT - STA. 1240+58.0, 8.0' RT	G-59	8192			350.5			
CURBING PLAN 3								
NH ROUTE 125								
STA. 1240+58.0, 37.0' LT - STA. 1242+78.5, 37.0' LT	G-60		220.5					
STA. 1242+50.3, 48.7' LT - STA. 1242+78.5, 48.8' LT	G-61		28.2					
STA. 1242+78.5, 48.8' LT - STA. 1242+78.5, 42.0' LT	G-62	5.9		10.2				
STA. 1243+13.2, 37.0' LT - STA. 1244+07.6, 37.0' LT	G-63		94.4					
STA. 1244+66.9, 77.8' LT - STA. 1244+66.7, 56.8' LT	G-64		21.1					
STA. 1244+66.7, 56.8' LT - STA. 1244+71.3, 42.0' LT	G-65	25	15.7					
STA. 1244+76.0, 37.0' LT - STA. 1247+05.0, 37.0' LT	G-66		229.0					
STA. 1247+76.5, 37.0' LT - STA. 1248+65.5, 37.0' LT	G-67		88.9					
STA. 1249+40.9, 37.0' LT - STA. 1254+66.7, 37.0' LT	G-68		519.9					
STA. 1240+58.0, 37.0' RT - STA. 1242+09.9, 37.0' RT	G-69		151.9					
STA. 1241+92.1, 95.8' RT - STA. 1241+92.2, 77.8' RT	G-70		18.0					
STA. 1241+92.2, 77.8' RT - STA. 1242+20.5, 78.0' RT	G-70A		28.3					
STA. 1242+20.5, 78.0' RT - STA. 1242+28.9, 96.1' RT	G-70B		19.9					
STA. 1242+59.2, 37.0' RT - STA. 1244+65.7, 37.0' RT	G-71		206.5					
STA. 1244+51.6, 50.2' RT - STA. 1244+65.7, 50.2' RT	G-72		14.1					
STA. 1244+65.7, 50.2' RT - STA. 1244+65.7, 42.0' RT	G-73	6.6		12.0				
STA. 1245+09.0, 44.0' RT - STA. 1245+09.0, 50.3' RT	G-74	6.6		10.1				
STA. 1245+09.0, 37.0' RT - STA. 1245+56.6, 37.0' RT	G-75		47.6					
STA. 1245+09.0, 50.3' RT - STA. 1245+56.6, 50.4' RT	G-76		47.6					
STA. 1245+56.6, 50.4' RT - STA. 1245+56.6, 42.0' RT	G-77	6.7		12.3				
STA. 1246+22.3, 37.0' RT - STA. 1247+66.6, 37.0' RT	G-78		144.3					
STA. 1248+10.8, 44.0' RT - STA. 1248+10.8, 51.9' RT	G-79	7.5		12.2				
STA. 1248+10.8, 51.9' RT - STA. 248+72.7, 52.3' RT	G-80		61.9					
STA. 1248+10.8, 37.0' RT - STA. 1249+71.0, 37.0' RT	G-81		160.3					
NOT USED	G-82							
STA. 1249+53.0, 52.8' RT - STA. 1249+71.2, 52.9' RT	G-83		18.2					
STA. 1249+71.2, 52.9' RT - STA. 1249+71.2, 42.0' RT	G-84	8		15.5				
STA. 1250+14.2, 55.6' RT - STA. 1250+14.1, 42.0' RT	G-85		13.5					
STA. 1250+19.1, 37.0' RT - STA. 1250+43.0, 37.0' RT	G-86		23.9					
STA. 1250+47.9, 58.6' RT - STA. 1250+48.0, 42.0' RT	G-87		16.7					
STA. 1250+89.8, 58.6' RT - STA. 1250+94.7, 42.0' RT	G-88	25	17.7					
STA. 1250+99.5, 37.0' RT - STA. 1253+07.7, 37.0' RT	G-89		201.6					
STA. 1240+58.0, 8.0' LT - STA. 1252+97.0, 8.0' LT	G-90				1239.0			
STA. 1240+58.0, 8.0' RT - STA. 1247+10.0, 8.0' RT	G-91				652.0			
STA. 1247+10.0, 8.0' RT - STA. 1248+85.0, 2.0' LT	G-92				175.3			
STA. 1248+85.0, 2.0' LT - STA. 1252+97.0, 2.0' LT	G-93				412.0			
	SUBTOTAL B		**2409.7**	**72.3**	**4349.4**	**16.6**	**0.0**	**0.0**

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	11	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

CURBING

ITEM NO.			609.01	609.02	609.216	609.226	609.5	609.936
ITEM		RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB	STRAIGHT GRANITE SLOPE CURB 6" HIGH	STRAIGHT GRANITE SLOPE CURB WITH RADIAL JOINTS, 6" HIGH	RESET GRANITE CURB	SPECIAL STRAIGHT GRANITE CURB (REVEAL 18" TO 24")
UNIT		FT	LF	LF	LF	LF	LF	LF
LOCATION	REF #							
CURBING PLAN 4								
NH ROUTE 125								
NOT USED	G-94							
STA. 1254+66.7, 37.0' LT - STA. 1256+38.6, 37.0' LT	G-95	15037	172.2					
STA. 1256+38.6, 37.0' LT - STA. 1265+05.6, 37.0' LT	G-96		867.0					
STA. 1265+59.7, 37.0' LT - STA. 1266+24.2, 37.0' LT	G-97		64.5					
STA. 1265+67.6, 48.3' LT - STA. 1266+24.2, 48.6' LT	G-98		56.6					
STA. 200+67.0, 26.0' LT - STA. 1254+27.4, 37.0' RT	G-99	30	38.1					
STA. 1254+27.4, 37.0' RT - STA. 1254+66.7, 37.0' RT	G-100		39.3					
STA. 1254+33.6, 60.7' RT - STA. 1254+66.7, 61.3' RT	G-101							33.2
STA. 1254+66.7, 61.3' RT - STA. 1255+53.9, 63.1' RT	G-102							86.9
STA. 1254+34.3, 62.7' RT - STA. 1254+66.7, 63.3' RT	G-103		32.5					
STA. 1254+66.7, 63.3' RT - STA. 1255+54.7, 65.1' RT	G-104		87.6					
STA. 1254+66.7, 37.0' RT - STA. 1256+38.4, 37.0' RT	G-105	14963	171.2					
STA. 1256+07.0, 56.4' RT - STA. 1256+38.4, 56.3' RT	G-106		31.2					
STA. 1256+38.4, 56.3' RT - STA. 1256+38.4, 42.0' RT	G-107	9.6		20.0				
STA. 1256+97.5, 42.0' RT - STA. 1256+97.5, 56.0' RT	G-108	9.5		19.6				
STA. 1256+97.5, 56.0' RT - STA. 1257+50.9, 55.7' RT	G-109		53.4					
STA. 1256+97.5, 37.0' RT - STA. 1258+80.0, 37.0' RT	G-110		182.5					
STA. 1257+69.1, 55.6' RT - STA. 1258+80.0, 55.1' RT	G-111		110.9					
STA. 1258+80.0, 55.1' RT - STA. 1258+80.0, 44.0' RT	G-112	9		16.3				
STA. 1259+37.9, 42.0' RT - STA. 1259+37.9, 54.8' RT	G-113	8.9		18.0				
STA. 1259+37.9, 37.0' RT - STA. 1259+79.3, 37.0' RT	G-114		41.3					
STA. 1259+37.9, 54.8' RT - STA. 1259+76.1, 54.6' RT	G-115		38.2					
STA. 1259+76.1, 54.6' RT - STA. 1259+79.5, 42.0' RT	G-116	9		17.8				
STA. 1260+21.2, 42.0' RT - STA. 1260+24.1, 54.4' RT	G-117	8.9		17.6				
STA. 1260+21.4, 37.0' RT - STA. 1262+39.0, 37.0' RT	G-118		217.8					
STA. 1260+24.1, 54.4' RT - STA. 1261+40.6, 53.8' RT	G-119		116.7					
STA. 1261+40.6, 53.8' RT - STA. 1261+51.6, 58.6' RT	G-120	15		12.4				
STA. 1261+51.6, 58.6' RT - STA. 1261+53.1, 60.4' RT	G-121		2.3					
STA. 1261+74.3, 53.6' RT - STA. 1262+32.7' 53.3' RT	G-122		58.4					
STA. 1262+44.5, 65.7' RT - STA. 1262+48.6, 59.1' RT	G-123	8.5		8.1				
STA. 1262+48.6, 59.1' RT - STA. 1262+49.0, 47.4' RT	G-124		11.8					
STA. 1262+49.0, 47.4' RT - STA. 1262+47.7, 42.0' RT	G-125	10		5.6				
STA. 1262+98.3, 65.5' RT - STA. 1262+99.1, 68.3' RT	G-126		2.9					
STA. 1262+96.7, 52.7' RT - STA. 1262+98.3, 65.5' RT	G-127	42	13.0					
STA. 1262+96.8, 51.5' RT - STA. 1262+96.7, 52.7' RT	G-128		1.1					
STA. 1262+96.8, 51.5' RT - STA. 1263+00.6, 42.0' RT	G-129	15		10.5				
STA. 1263+11.8, 37.0' RT - STA. 1264+02.8, 37.0' RT	G-130		91.0					
STA. 1263+81.3, 52.6' RT - STA. 1264+02.8, 52.5' RT	G-131		21.5					
STA. 1264+02.8, 52.5' RT - STA. 1264+02.8, 42.0' RT	G-132	7.7		14.9				
STA. 1264+57.6, 42.0' RT - STA. 1264+57.6, 52.2' RT	G-133	7.6		14.6				
STA. 1254+57.6, 37.0' RT - STA. 1266+05.9, 37.0' RT	G-134		148.3					
STA. 1264+57.6, 52.2' RT - STA. 1265+59.5, 51.7' RT	G-135		101.9					
STA. 1265+59.5, 51.7' RT - STA. 1265+66.32, 52.9' RT	G-136	20		6.9				
STA. 1252+97.0, 2.0' LT - STA. 1252+97.0, 8.0' LT	G-137	3				9.4		
STA. 1254+13.0, 2.0' RT - STA. 1254+13.0, 8.0' RT	G-138	3				9.4		
		SUBTOTAL C	**2773.2**	**182.3**	**0.0**	**18.8**	**0.0**	**120.1**

CURBING

ITEM NO.			609.01	609.02	609.216	609.226	609.5	609.936
ITEM		RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB	STRAIGHT GRANITE SLOPE CURB 6" HIGH	STRAIGHT GRANITE SLOPE CURB WITH RADIAL JOINTS, 6" HIGH	RESET GRANITE CURB	SPECIAL STRAIGHT GRANITE CURB (REVEAL 18" TO 24")
UNIT		FT	LF	LF	LF	LF	LF	LF
LOCATION	REF #							
CURBING PLAN 4 (CONTINUED)								
NH ROUTE 125								
STA. 1254+13.0, 2.0' RT - STA. 1254+66.7, 2.0' RT	G-139				53.7			
STA. 1254+13.0, 8.0' RT - STA. 1254+66.7, 8.0' RT	G-140				53.7			
STA. 1254+66.7, 2.0' RT - STA. 1256+38.6, 2.0' RT	G-141	14998			171.8			
STA. 1254+66.7, 8.0' RT - STA. 1256+38.6, 8.0' RT	G-142	14992			171.7			
STA. 1256+38.6, 2.0' RT - STA. 1257+55.0, 2.0' RT	G-143				116.5			
STA. 1256+38.6, 8.0' RT - STA. 1267+19.9, 8.0' RT	G-144				1081.4			
STA. 1257+55.0, 2.0' RT - STA. 1258+30.0, 8.0' LT	G-145				75.7			
STA. 1258+30.0, 8.0' LT - STA. 1267+19.9, 8.0' LT	G-146				889.9			
ACCESS ROAD								
NOT USED	G-200							
STA. 1254+33.6, 60.7' RT - STA. 200+84.2, 36.3' LT	G-201							34.9
STA. 1254+34.3, 62.7' RT - STA. 200+85.1, 38.3' LT	G-202		33.2					
STA. 200+67.0, 26.0' LT - STA. 201+18.8, 26.0' LT	G-203		51.8					
STA. 200+84.2, 36.3' LT - STA. 201+18.8, 36.3' LT	G-204							34.7
STA. 200+85.1, 38.3' LT - STA. 201+18.8, 38.4' LT	G-205		33.8					
STA. 201+18.8, 38.4' LT - STA. 201+18.8, 31.0' LT	G-206	6.2		10.9				
STA. 201+71.5, 27.8' LT - STA. 201+71.5, 34.8' LT	G-207	6.3		10.4				
STA. 201+71.5, 34.8' LT - STA. 201+92.2, 34.0' LT	G-208		19.6					
STA. 201+70.5, 22.4' LT - STA. 202+45.0, 16.1' LT	G-209	629.1	72.6					
STA. 202+45.0, 16.1' LT - STA. 202+63.8, 14.9' LT	G-210	309.7	18.4					
STA. 203+23.6, 15.0' LT - STA. 204+86.6, 15.0' LT	G-211		163.0					
STA. 204+86.6, 15.0' LT - STA. 109+09.3, 15.0' LT	G-212	50	66.3					
STA. 202+10.3, 24.0' LT - STA. 202+45.4, 21.0' LT	G-213							34.0
STA. 1253+07.7, 37.0' RT - STA. 200+66.0, 29.3' RT	G-214	35	39.2					
STA. 202+45.4, 21.0' LT - STA. 202+69.2, 19.7' LT	G-215							23.1
STA. 201+26.4, 26.9' RT - STA. 201+63.3, 23.2' RT	G-216		37.1					
STA. 201+63.3, 23.2' RT - STA. 202+15.3, 18.0' RT	G-217	673.6	53.9					
STA. 202+15.3, 18.0' RT - STA. 202+61.1, 16.5' RT	G-218	667.9	47.0					
NOT USED	G-219							
STA. 202+61.1, 16.5' RT - STA. 202+61.1, 24.7' RT	G-220	4.1		13.1				
STA. 203+08.6, 37.8' RT - STA. 203+02.8, 19.6' RT	G-221	10		25.2				
STA. 203+02.8, 19.6' RT - STA. 203+17.7, 15.0' RT	G-221 A	26.2		15.8				
STA. 203+05.0, 15.0' RT - STA. 204+53.9, 15.0' RT	G-222		136.1					
STA. 204+53.9, 15.0' RT - STA. 107+74.4, 15.0' LT	G-223	50	91.4					
SERVICE ROAD								
STA. 107+00.0, 15.0' LT - STA. 107+74.4, 15.0' LT	G-224	3485	74.1					
NOT USED	G-225							
STA. 109+09.3, 15.0' LT - STA. 111+78.0, 15.0' LT	G-226		262.6					
STA. 111+78.0, 15.0' LT - STA. 116+97.7, 15.0' LT	G-227	1435	514.4					
STA. 116+97.7, 15.0' LT - STA. 120+15.3, 15.0' LT	G-228	740	324.1					
STA. 117+40.3, 20.0' LT - STA. 117+80.7, 20.0' LT	G-229	745						41.4
STA. 117+40.3, 23.0' LT - STA. 117+80.7, 23.0' LT	G-230	748						41.6
STA. 105+74.8, 15.0' RT - STA. 105+89.4, 15.0' RT	G-231A	3515	14.7					
STA. 106+58.7, 15.0' RT - STA. 108+19.4, 15.0' RT	G-231	3515	161.4					
STA. 108+19.4, 15.0' RT - STA. 108+45.0, 15.0' RT	G-232		25.6					
STA. 108+50.0, 25.0' RT - STA. 108+50.0, 20.0' RT	G-233	5		7.9				
		SUBTOTAL D	**2240.3**	**83.3**	**2614.4**	**0.0**	**0.0**	**209.7**

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	12	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

CURBING

ITEM NO.			609.01	609.02	609.216	609.226	609.5	609.936
ITEM		RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB	STRAIGHT GRANITE SLOPE CURB 6" HIGH	STRAIGHT GRANITE SLOPE CURB WITH RADIAL JOINTS, 6" HIGH	RESET GRANITE CURB	SPECIAL STRAIGHT GRANITE CURB (REVEAL 18" TO 24")
UNIT		FT	LF	LF	LF	LF	LF	LF
LOCATION	REF #							
CURBING PLAN 4 (CONTINUED)								
SERVICE ROAD								
STA. 109+10.2, 15.0' RT - STA. 111+78.0, 15.0' RT	G-234		262.6					
STA. 111+78.0, 15.0' RT - STA. 116+97.7, 15.0' RT	G-235	1465	525.1					
STA. 116+97.7, 15.0' RT - STA. 120+15.0, 15.0' RT	G-236	710	310.7					
CURBING PLAN 5								
NH ROUTE 125								
STA. 1266+24.2, 48.6' LT - STA. 1266+24.2, 42.0' LT	G-147	5.8		9.9				
STA. 1266+65.9, 44.0' LT - STA. 1266+65.9, 48.8' LT	G-148	5.9		8.2				
STA. 1266+65.9, 48.8' LT - STA. 1266+79.0, 48.9' LT	G-149		13.1					
STA. 1266+65.9, 37.0' LT - STA. 1267+19.9, 37.0' LT	G-150		54.0					
STA. 1267+19.9, 37.0' LT - STA. 1268+19.0, 37.0' LT	G-151	14963	98.8					
STA. 1268+19.0, 37.0' LT - STA. 1268+63.4, 37.0' LT	G-152		44.4					
STA. 1269+40.3, 37.0' LT - STA. 1269+64.6, 37.0' LT	G-153		24.3					
STA. 1269+99.2, 37.0' LT - STA. 1271+73.8, 37.0' LT	G-154		174.5					
STA. 1271+73.8, 37.0' LT - STA. 1271+95.0, 37.0' LT	G-155	1352	21.8					
STA. 1266+62.1, 42.0' RT - STA. 1266+62.1, 51.2' RT	G-156	7.1		13.3				
STA. 1266+62.1, 37.0' RT - STA. 1267+19.9, 37.0' RT	G-157		57.8					
STA. 1266+62.1, 51.2' RT - STA. 1267+19.9, 51.0' RT	G-158		58.1					
STA. 1267+19.9, 37.0' RT - STA. 1268+16.8, 37.0' RT	G-159	15037	97.1					
STA. 1267+19.9, 51.0' RT - STA. 1267+80.2, 50.9' RT	G-160		60.2					
STA. 1267+80.2, 50.9' RT - STA. 1267+94.0, 56.5' RT	G-161	20		15.3				
STA. 1267+94.0, 56.5' RT - STA. 1268+09.1, 71.2' RT	G-162		21.1					
STA. 1268+16.8, 37.0' RT - STA. 300+66.7, 10.0' RT	G-163	40	43.7					
NOT USED	G-164							
STA. 1268+84.5, 48.0' RT - STA. 1269+07.8, 37.0' RT	G-165	30	17.8					
STA. 1269+07.8, 37.0' RT - STA. 1270+30.3, 37.0' RT	G-166		122.5					
NOT USED	G-167							
NOT USED	G-168							
STA. 1267+19.9, 8.0' LT - STA. 1268+19.0, 8.0' LT	G-169	14992			99.0			
STA. 1267+19.9, 8.0' RT - STA. 1268+19.0, 8.0' RT	G-170	15008			99.1			
STA. 1268+19.0, 8.0' LT - STA. 1271+73.8, 8.0' LT	G-171				354.8			
STA. 1268+19.0, 8.0' RT - STA. 1269+65.0, 8.0' RT	G-172				146.0			
STA. 1269+65.0, 8.0' RT - STA. 1270+65.0, 2.0' LT	G-173				100.5			
STA. 1270+65.0, 2.0' LT - STA. 1271+73.8, 2.0' LT	G-174				108.8			
STA. 1271+73.8, 8.0' LT - STA. 1273+53.0, 8.0' LT	G-175	1323			180.2			
STA. 1271+73.8, 2.0' LT - STA. 1273+53.0, 2.0' LT	G-176	1317			179.5			
SERVICE ROAD								
STA. 120+15.3, 15.0' LT - STA. 122+58.4, 15.0' LT	G-237		243.1					
STA. 122+58.4, 15.0' LT - STA. 124+71.6, 15.0' LT	G-238	235	200.4					
STA. 124+71.6, 15.0' LT - STA. 125+58.2, 15.0' LT	G-239		86.6					
STA. 125+58.2, 15.0' LT - STA. 304+02.3, 15.0' RT	G-240	30	39.4					
STA. 121+04.9, 15.0' RT - STA. 122+58.4, 15.0' RT	G-241		153.5					
STA. 122+58.4, 15.0' RT - STA. 124+71.6, 15.0' RT	G-242	265	226.0					
STA. 124+71.6, 15.0' RT - STA. 125+66.7, 15.0' RT	G-243		95.1					
STA. 125+66.7, 15.0' RT - STA. 125+86.1, 24.2' RT	G-244	25	13.8					
SUBTOTAL E			**3065.5**	**46.7**	**1267.9**	**0.0**	**0.0**	**0.0**

CURBING

ITEM NO.			609.01	609.02	609.216	609.226	609.5	609.936
ITEM		RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB	STRAIGHT GRANITE SLOPE CURB 6" HIGH	STRAIGHT GRANITE SLOPE CURB WITH RADIAL JOINTS, 6" HIGH	RESET GRANITE CURB	SPECIAL STRAIGHT GRANITE CURB (REVEAL 18" TO 24")
UNIT		FT	LF	LF	LF	LF	LF	LF
LOCATION	REF #							
CURBING PLAN 5 (CONTINUED)								
OLD ROAD								
NOT USED	G-245							
NOT USED	G-246							
STA. 301+00.0, 10.0' RT - STA. 301+10.5, 10.0' RT	G-247	110	11.5					
STA. 301+40.3, 10.0' RT - STA. 302+14.4, 10.0' RT	G-248		74.2					
STA. 302+14.4, 10.0' RT - STA. 302+71.0, 10.0' RT	G-249	2010	56.8					
STA. 302+71.0, 10.0' RT - STA. 303+11.3, 10.0' RT	G-250		40.3					
STA. 303+84.0, 10.0' RT - STA. 304+02.3, 10.0' RT	G-251		18.3					
NOT USED	G-252							
SUBTOTAL F			**201.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
SUBTOTAL A			**1590.3**	**72.2**	**310.6**	**0.0**	**0.0**	**0.0**
SUBTOTAL B			**2409.7**	**72.3**	**4349.4**	**16.6**	**0.0**	**0.0**
SUBTOTAL C			**2773.2**	**182.3**	**0.0**	**18.8**	**0.0**	**120.1**
SUBTOTAL D			**2240.3**	**83.3**	**2614.4**	**0.0**	**0.0**	**209.7**
SUBTOTAL E			**3065.5**	**46.7**	**1267.9**	**0.0**	**0.0**	**0.0**
GROSS CURB AVAILABLE FOR RESET							*** 1438.3**	
CURB FOR RESET (ASSUME 25% BREAKAGE)			*** -1171.5**		*** -266.8**			
CONTRACT SUBTOTAL			**11108.6**	**456.8**	**8275.5**	**35.4**	*** 1438.3**	**329.8**
ROUNDING			41.4	3.2	24.5	0.6	11.7	0.2
TOTAL			**11150**	**460**	**8300**	**36**	**1450**	**330**

* FROM RESET GRANITE CURB SUMMARY

ITEM 202.201 DEMOLISHING BUILDINGS - 1 U

Parcel No.	Address	Former Property Owner	Description & Characteristics
PARCEL N0. 181	32 ROUTE 125 KINGSTON, NH 03848	KENNETH FREDERICK	EARTH-SHELTERED, SUBTERRANEAN CONCRETE BLOCK RESIDENTIAL BUILDING WITH A DETACHED WOOD FRAME GARAGE, REPORTEDLY BUILT IN 1980. PRIVATE SEWER AND WELL ON SITE.

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

SUBSIDIARY ITEMS

DESCRIPTION	APPROX. QUANTITY
SERVICE ROAD EMBANKMENT - POST SETTLEMENT PERIOD	407 CY
SERVICE ROAD CRUSHED STONE - POST SETTLEMENT PERIOD	586 CY
REMOVAL OF EXISTING BOUNDS	11 EA
REMOVAL OF EXISTING PIPES, (WHERE INDICATED ON THE PLANS)	237 LF
REMOVAL OF EXISTING DRAINAGE STRUCTURES, (WHERE INDICATED ON THE PLANS)	2 EA
REMOVAL AND DISPOSAL OF EXISTING TRAFFIC SIGNS (TYPES B, BB, C, CC)	28 EA
REMOVAL OF HAY BALES OR SILT FENCE, WHERE ORDERED	

NOTE : THIS LIST OF SUBSIDIARY ITEMS SHOULD NOT BE CONSIDERED A COMPLETE DIGEST OF THE SUBSIDIARY WORK PRESENT ON THIS PROJECT. REFER TO PLANS, PROPOSAL, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.

UTILITY AGREEMENT WORK

UNITIL ENERGY SYSTEMS (PERMANENT LIGHTING)

TOWN OF PLAISTOW (PROPOSED WATER LINE)

MATERIALS SALVAGED TO THE STATE

EXISTING DRAINAGE FRAMES AND GRATES	
EXISTING SIGN POSTS AND HARDWARE	
PAVEMENT MILLINGS	1,025 TONS

RESET GRANITE CURB

CURB TYPE	VERTICAL GRANITE CURB	SLOPED GRANITE CURB
UNIT	FT	FT
LOCATION		
STA. 1231+59.9 - STA. 1231+75.8, LT		34.1
STA. 1232+64.4 - STA. 1234+22.3, RT.		321.7
STA. 1231+63.0 - STA. 1231+71.4, RT	8.3	
STA. 1231+72.0 - STA. 1231+97.5, LT	39.3	
STA. 1231+86.0 - STA. 1232+00.5, RT	24.1	
STA. 1232+43.7 - STA. 1232+45.7, RT	12.7	
STA. 1232+46.5 - STA. 1232+68.4, LT	36.5	
STA. 1232+69.6 - STA. 1233+22.0, RT	52.4	
STA. 1232+73.1 - STA. 1233+37.0, LT	80.3	
STA. 1232+87.3 - STA. 1233+37.8, LT	50.5	
STA. 1233+83.2 - STA. 1234+49.7, RT	66.5	
STA. 1233+89.3 - STA. 1234+93.3, LT	104	
STA. 1234+74.8 - STA. 1235+45.6, RT	70.8	
STA. 1235+17.4 - STA. 1236+00.0, LT	82.7	
STA. 1235+77.2 - STA. 1236+22.4, RT	45.2	
STA. 1236+23.3 - STA. 1236+86.7, LT	63.4	
STA. 1236+49.1 - STA. 1238+27.2, RT	177.6	
STA. 1237+22.5 - STA. 1237+68.0, LT	45.7	
STA. 1237+91.6 - STA. 1238+52.4, LT	61	
STA. 1238+03.5 - STA. 1238+30.7, RT	39.1	
STA. 1238+76.4 - STA. 1239+40.4, LT	64.2	
STA. 1238+93.6 - STA. 1239+57.8, RT	64.1	
STA. 1239+63.6 - STA. 1240+46.0, LT	82.7	
STA. 1239+64.6 - STA. 1239+72.6, RT	16.6	
STA. 1239+99.4 - STA. 1240+05.4, RT	17.8	
STA. 1240+15.8 - STA. 1240+79.7, RT	63.8	
STA. 1241+14.6 - STA. 1241+69.8, RT	55.3	
STA. 1241+18.6 - STA. 1241+86.7, RT	68.2	
STA. 1244+66.9 - STA. 1244+86.6, LT	69.2	
SUBTOTAL	**1562.0**	**355.8**
ASSUME 25% BREAKAGE DURING REMOVAL	**390.5**	**89.0**
TOTAL CURB FOR RESET	*** 1171.5**	*** 266.8**
CONTRACT SUBTOTAL	*** 1438.3**	

*** TO CURBING SUMMARY**

BOUNDS

ITEM NO.	622.2	622.4
ITEM	CONCRETE BOUNDS	STONE BOUNDS
UNIT	EA	EA
LOCATION		
NH ROUTE 125		
1232+82.86, 47.00' LT	1	
1237+07.14, 56.06' RT	1	
1237+07.14, 47.00' LT	1	
1240+57.99, 54.00' RT	1	
1240+57.99, 47.00' LT	1	
1241+00.00, 46.71' LT	1	
1246+50.00, 50.89' RT	1	
1249+65.00, 52.87' RT	1	
1250+40.00, 46.59' LT	1	
1251+00.00, 47.00' LT	1	
1253+03.54, 52.75' RT	1	
1254+38.69, 55.99' RT	1	
1254+66.73, 47.00' LT	1	
1254+66.73, 56.17' RT	1	
1256+38.55, 47.00' LT	1	
1256+38.55, 56.28' RT	1	
1262+99.53, 47.00' LT	1	
1262+99.53, 53.00' RT	1	
1264+58.54, 52.21' RT	1	
1266+08.08, 51.46' RT	1	
ACCESS ROAD		
200+75.00, 39.34' RT	1	
200+84.18, 36.33' LT	1	
201+62.79, 32.00' RT		1
201+62.79, 35.61' LT		1
202+76.97, 25.00' RT		1
202+76.97, 25.00' LT		1
204+53.88, 25.00' RT		1
204+86.59, 25.00' LT		1
SERVICE ROAD		
102+00.00, 90.00' RT		1
102+00.00, 120.00' RT		1
102+70.00, 25.00' LT		1
102+89.95, 25.00' LT		1
103+50.00, 235.00' RT		1
105+62.95, 72.71' RT		1
105+84.10, 215.00' RT		1
106+97.20, 25.00' RT		1
107+74.41, 25.00' LT		1
108+19.39, 25.00' RT		1
109+09.30, 25.00' LT		1
111+77.95, 25.00' LT		1
111+77.95, 25.00' RT		1
116+97.71, 25.00' RT		1
116+97.71, 25.00' LT		1
120+15.27, 25.00' RT		1
120+15.27, 25.00' LT		1
122+58.38, 25.00' LT		1
122+58.38, 25.00' RT		1
124+29.78, 25.00' RT		1
124+30.37, 27.93' RT		1
124+71.60, 25.00' LT		1
125+61.00, 25.00' LT		1
125+80.66, 48.39' LT		1
125+83.63, 32.30' RT		1
SUBTOTAL A	**22**	**31**
ROUNDING	0	0
TOTAL	**22**	**31**

CLEARING & GRUBBING

ITEM NO.		201.1
ITEM		CLEARING AND GRUBBING (F)
UNIT		AC
LOCATION	DESIGNATED AREA	
STA. 1238+34 - STA. 1238+49, LT	A	0.002
STA. 1239+27 - STA. 1239+44, LT	B	0.002
STA. 1237+44 - STA. 1237+76, RT	C	0.031
STA. 1250+08 - STA. 1250+88, LT	D	0.030
STA. 1250+67 - STA. 1256+20, LT	E	0.438
STA. 102+15 - STA. 106+60, LT/RT	F	1.333
STA. 1255+87 - STA. 1257+04, LT	G	0.032
STA. 1256+97 - STA. 1257+15, LT	H	0.004
STA. 1257+45 - STA. 1257+78, LT	I	0.010
STA. 1258+00 - STA. 1258+35, LT	J	0.005
STA. 1258+29 - STA. 1258+49, LT	K	0.002
STA. 1259+07 - STA. 1260+48, LT	L	0.056
STA. 1260+21 - STA. 1260+36, LT	M	0.003
STA. 1260+67 - STA. 1262+88, LT	N	0.108
STA. 1261+45 - STA. 1261+87, LT	O	0.005
STA. 1263+06 - STA. 1263+22, LT	P	0.004
STA. 1263+14 - STA. 1263+38, LT	Q	0.006
STA. 1264+27 - STA. 1264+91, LT	R	0.011
STA. 111+90- STA. 119+74, LT/RT	S	1.000
Label Not Used	T	-
STA. 1270+76 - STA. 1271+02, LT	U	0.002
Label Not Used	V	-
Label Not Used	W	-
STA. 108+92 - STA. 109+28, LT	X	0.011
STA. 109+32 - STA. 110+66, RT	Y	0.027
STA. 110+27 - STA. 111+43, LT	Z	0.054
STA. 123+48 - STA. 124+15, LT	AA	0.025
STA. 124+07 - STA. 124+65, RT	BB	0.006
STA. 1242+24 - STA. 1243+04, RT	CC	0.062
SUBTOTAL		**3.269**
ROUNDING		**0.041**
TOTAL		**3.3**

RECONSTRUCT STONE WALL

ITEM 572.2 - RECONSTRUCTING STONE WALL MULTIPLE STONES WIDE

NH ROUTE 125		
STA. 1247+70 - STA. 1247+80, LT	LF	30

TRAFFIC CONTROL

ITEM NO.			203.1	304.4	403.99
ITEM DESCRIPTION			COMMON EXCAVATION	CRUSHED STONE (FINE GRADATION) (F)	TEMPORARY BITUMINOUS PAVEMENT
ITEM NO.	ITEM DESCRIPTION	UNIT	CY	CY	TON
670.04601	CONSTRUCT AND REMOVE DETOUR	1	71.5	143	73.28
	TOTAL		*	**	**

* QUANTITY IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND IS NOT INCLUDED IN SPECIFIC ITEM TOTAL

** SUBTOTAL INCLUDED IN SURFACING MATERIALS SUMMARY

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	14	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

EARTHWORK

ITEM		CUBIC YARDS
COMMON EXCAVATION IN SECTIONS, INCLUDING BOULDERS AND PAVEMENT		41596.0
COMMON EXCAVATION NOT IN SECTIONS (BITUMINOUS PAVEMENT)		724.0
COMMON EXCAVATION FOR WETLAND CREATION, INCLUDING BOULDERS		
DRIVE AND APPROACH EXCAVATION, INCLUDING BOULDERS		2261.0
COMMON EXCAVATION IN SECTIONS, EXCL. BLDRS. & CONC. PVMT.		41596.0
COMMON EXCAVATION FOR WETLAND CREATION		
MUCK EXCAVATION IN SECTIONS		
TOPSOIL REMOVED BENEATH FILL SECTIONS		3085.0
UNSUITABLE MATERIAL REMOVED BENEATH FILL SECTIONS		
DRIVE AND APPROACH EXCAVATION		2261.0
TOTAL COMMON EXCAVATION		47666.0
COMMON EXCAVATION FOR ESTIMATE	**ITEM 203.1**	**47700.0**
MUCK EXCAVATION		
MUCK EXCAVATION FOR ESTIMATE	**ITEM 203.4**	**0.0**
WETLAND SOILS REMOVED FOR MITIGATIONS (CUTS AND FILLS)		
WETLAND SOILS FOR MITIGATION FOR ESTIMATE	**ITEM 203.49**	**0.0**
REHANDLING SURCHARGE MATERIALS		
REHANDLING SURCHARGE MAT'L FOR ESTIMATE	**ITEM 203.7**	**0.0**
UNCLASSIFIED CHANNEL EXCAVATION, ROADWAY (SEE ITEM 207.3)		
UNCLASSIFIED CHANNEL EXCAVATION, BRIDGE (SEE ITEM 207.3)		
COMMON BRIDGE EXCAVATION (ITEM 504.1)		
COMMON CHANNEL EXCAV., ROADWAY (SEE ITEM 207.1)		
COMMON CHANNEL EXCAV., BRIDGE (SEE ITEM 207.1)		
ROCK EXCAVATION IN SECTIONS (SOLID)		
ROCK EXCAVATION FOR WETLAND CREATION (SOLID)		
BOULDERS IN SECTIONS		
CONCRETE PAVEMENT IN SECTIONS		
BOULDERS IN COMMON EXCAVATION FOR WETLAND CREATION		
DRIVE AND APPROACH EXCAVATION (SOLID ROCK)		
DRIVE AND APPROACH EXCAVATION (BOULDERS)		
ROCK OVERBREAKAGE		
ROCK NOT COVERED BY SECTIONS		
TOTAL ROCK EXCAVATION		0.0
ROCK EXCAVATION FOR ESTIMATE	**ITEM 203.2**	**0.0**
ROCK STRUCTURE EXCAVATION (SEE ITEM 206.2)		
ROCK BRIDGE EXCAVATION (SEE ITEM 504.2, 504.21, OR 504.24)		
ROCK CHANNEL EXCAVATION, ROADWAY (SEE ITEM 207.2)		
ROCK CHANNEL EXCAVATION, BRIDGE (SEE ITEM 207.2)		
SECTIONS FILL		15695.0
TOPSOIL REPLACEMENT		3085.0
UNSUITABLE MATERIAL REPLACEMENT		
MUCK REPLACEMENT		
DRIVE AND APPROACH FILL		190.0
WETLAND SOIL REPLACEMENT		
FILL FOR ROCK CUT EARTH BERMS		
REPLACE EMBANKMENT SETTLEMENT WITH FILL MATERIAL		
EMBANKMENT-IN-PLACE (ITEM 203.6)		18970.0
EMBANKMENT-IN-PLACE (F) FOR ESTIMATE	**ITEM 203.6**	**19000.0**

NON-PARTICIPATING GAS LINE ITEMS

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY
202.41	REMOVAL OF EXISTING PIPE 0-24" DIAMETER	LF	4238

FENCING

	ITEM NO.	607.360	607.4360	607.73618	607.9204
	DESCRIPTION	CHAIN LINK FENCE WITH VINYL COATED STEEL FABRIC, 6 FEET HIGH	POST ASSEMBLIES FOR FENCE WITH VINYL COATED STEEL FABRIC, 6 FT. HIGH	18 FT. OPENING CHAIN LINK DOUBLE GATES /VINYL CTD. STEEL FABRIC, 6 FT. HIGH	RESETTING CHAIN LINK FENCE WITH ALUMINUM COATED STEEL FABRIC, 4' HIGH
REFERENCE LETTER	UNIT	LF	EA	EA	LF
	LOCATION				
	BMP #4				
A	Sta. 102+00 - 105+84.1, RT	1008.7	6		
B	Sta. 102+90, RT.		2	1	
C	Sta. 105+35, RT		2	1	
D	Sta. 124+14.8 - 124+23.7, LT				8
	SUBTOTAL	**1008.7**	**10**	**2**	**8**
	ROUNDING	1.3	0	-	-
	TOTAL	**1010**	**10**	**2**	**8**

GUARDRAIL

	ITEM NO.	203.55552	606.1255	606.18001	621.2
	ITEM	GUARDRAIL EAGRT OFFSET PLATFORM ALTERNATE, TL 2	BEAM GUARDRAIL (TERMINAL UNIT TYPE EAGRT, TL 2) (STEEL POST)	31" W-BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST)	RETROREFLECTIVE BEAM GUARDRAIL DELINEATOR
	UNIT	U	U	LF	EA
	REF NO. #				
	SERVICE ROAD				
1	STA. 103+22.5 - STA. 103+47.5, RT	1	1		
1	STA. 103+47.5 - STA. 104+85.0, RT			137.50	2
1	STA. 104+85.0 - STA. 105+10.0, RT	1	1		
2	STA. 115+25.0 - STA. 115+50.0, RT	1	1		
2	STA. 115+50.0 - STA. 118+37.5, RT			287.50	5
2	STA. 118+37.5 - STA. 118+62.5, RT	1	1		
3	STA. 120+37.5 - STA. 120+62.5, LT	1	1		
3	STA. 120+62.5 - STA. 123+00.0, LT			237.50	3
3	STA. 123+00.0 - STA. 123+25.0, LT	1	1		
	SUBTOTAL	**6**	**6**	**662.5**	**10**
	ROUNDING	-	-	12.5	-
	TOTAL	**6**	**6**	**675**	**10**

LOAM

ITEM NO.	641.
ITEM	LOAM
UNIT	CY
NH ROUTE 125	
STA. 1232+62 - STA. 1233+57, LT	8.7
STA. 1232+59 - STA. 1233+23, RT	1.2
STA. 1233+53 - STA. 1235+53, RT	24.9
STA. 1233+82 - STA. 1234+99, LT	13.9
STA. 1235+13 - STA. 1236+05, LT	6.1
STA. 1235+78 - STA. 1236+32, RT	4.6
STA. 1236+20 - STA. 1236+93, LT	8.0
STA. 1236+42 - STA. 1238+34, RT	53.7
STA. 1237+19 - STA. 1237+71, LT	6.6
STA. 1237+85 - STA. 1238+57, LT	4.6
STA. 1238+68 - STA. 1239+47, LT	4.5
STA. 1238+79 - STA. 1239+73, RT	11.2
STA. 1239+56 - STA. 1242+84, LT	25.1
STA. 1239+99 - STA. 1241+47, RT	24.1
STA. 1241+53 - STA. 1242+44, RT	27.4
STA. 1242+28 - STA. 1243+39, RT	20.8
STA. 1242+52 - STA. 1243+50, RT	36.4
STA. 1243+09 - STA. 1244+18, LT	10.7
STA. 1243+39 - STA. 1244+72, RT	40.3
STA. 1244+67 - STA. 1247+15, LT	19.8
STA. 1245+02 - STA. 1245+63, RT	5.7
STA. 1246+12 - STA. 1247+73, RT	19.2
STA. 1247+67 - STA. 1248+79, LT	8.9
STA. 1248+03 - STA. 1249+79, RT	23.2
STA. 1249+31 - STA. 1265+12, LT	488.0
STA. 1250+14 - STA. 1250+48, RT	2.5
STA. 1250+90 - STA. 1253+42, RT	35.5
STA. 1253+97 - STA. 1254+06, RT	1.8
STA. 1254+02 - STA. 1256+48, RT	62.1
STA. 1256+88 - STA. 1258+89, RT	32.5
STA. 1259+29 - STA. 1259+85, RT	8.3
STA. 1260+15 - STA. 1262+49, RT	36.1
STA. 1262+97 - STA. 1264+11, RT	19.4
STA. 1264+50 - STA. 1266+16, RT	20.9
STA. 1265+40 - STA. 1266+30, LT	6.5
STA. 1266+55 - STA. 1268+53, RT	38.0
STA. 1266+60 - STA. 1268+76, LT	23.5
STA. 1268+92 - STA. 1270+34, RT	11.0
STA. 1269+16 - STA. 1269+70, LT	6.2
STA. 1269+94 - STA. 1272+20, LT	14.5
SERVICE ROAD	
STA. 124+15 - STA. 125+83, LT	18.1
STA. 124+27 - STA. 125+92, RT	10.0
ACCESS ROAD	
STA. 201+23 - STA. 202+65, RT	14.3
STA. 201+65 - STA. 202+69, LT	6.1
STA. 203+00 - STA. 205+02, RT	51.0
STA. 203+18 - STA. 205+00, LT	18.4
OLD ROAD	
STA. 300+49 - STA. 305+00, LT	50.3
STA. 300+94 - STA. 301+15, RT	2.6
STA. 301+30 - STA. 303+21, RT	16.9
STA. 305+28 - STA. 306+50, RT	2.4
STA. 305+24 - STA. 306+23, LT	1.8
SUBTOTAL	**1408.3**
ROUNDING	---
TOTAL	*

* SEE LANDSCAPING AND SLOPE PROTECTION SUMMARY

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	15	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

INCIDENTAL ITEMS

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
201.881	INVASIVE SPECIES CONTROL TYPE I	SY	11050
201.882	INVASIVE SPECIES CONTROL TYPE II	SY	860
203.35	HANDLING EXCAVATED CONTAMINATED SOILS (DEPARTMENT DISPOSAL)	CY	100
203.53	LOW PERMEABILITY FILL (F)	CY	1685
206.19	COMMON STRUCTURE EXCAVATION EXPLORATORY	CY	50
211.11	VIBRATION MONITORING SERVICES	HR	40
214	FINE GRADING	U	1
503.201	COFFERDAMS	U	1
606.6101	STEP HANDRAIL, STEEL	LF	26
618.61	UNIFORMED OFFICERS WITH VEHICLE	$	280000
618.7	FLAGGERS	HR	8400
619.1	MAINTENANCE OF TRAFFIC	U	1
619.25	PORTABLE CHANGEABLE MESSAGE SIGN	U	4
619.279	AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN	U	2
645.7	STORM WATER POLLUTION PREVENTION PLAN	U	1
645.71	MONITORING SWPPP AND EROSION AND SEDIMENT CONTROLS	HR	600
670.02	SEDIMENT SUMP MEASURING BLOCK	EA	1
670.066	MAILBOX SUPPORT ASSEMBLIES	EA	12
670.0661	MULTIPLE MAILBOXES SUPPORT ASSEMBLIES	EA	2
670.1611	DISCHARGE TREATED CONTAMINATED WATER	U	1
692	MOBILIZATION	U	1
693	ON-THE-JOB TRAINING OF UNSKILLED WORKERS	$	600
697.11	INVASIVE SPECIES CONTROL AND MANAGEMENT PLAN	U	1
697.31	PROJECT OPERATIONS PLAN	U	1
697.41	CRITICAL PATH METHOD (CPM) ELECTRONIC SCHEDULE	U	1
698.12	FIELD OFFICE TYPE B	MON	36
698.2	PHYSICAL TESTING LABORATORY	MON	26
699	MISCELLANEOUS TEMPORARY EROSION AND SEDIMENT CONTROL	$	125000
1009.21	TREATMENT OR DISPOSAL OF CONTAMINATED GROUNDWATER (FRAC TANK)	$	25000
1010.15	FUEL ADJUSTMENT	$	70000
1010.2	ASPHALT CEMENT ADJUSTMENT	$	50000
1010.3	QUALITY CONTROL QUALITY ASSURANCE (QC/QA) ASPHALT	$	66000

SIDEWALK

ITEM NO.	304.4	608.12	608.24	608.26	608.54
ITEM	CRUSHED STONE (FINE GRADATION) (F)	2" BITUMINOUS SIDEWALK (F)	4" CONCRETE SIDEWALK (F)	6" CONCRETE SIDEWALK (F)	DETECTABLE WARNING DEVICES, CAST IRON
UNIT	CY	SY	SY	SY	SY
LOCATION					
NH ROUTE 125	1192	3577.0	149.0	954.6	22.1
SERVICE ROAD	657	1970.6	42.8	---	6.3
ACCESS ROAD	62	186.9	---	---	---
OLD ROAD	44	132.9	---	---	---
SUBTOTAL	**1955**	**5867.4**	**191.8**	**954.6**	**28.4**
ROUNDING	---	32.6	8.2	5.4	1.6
TOTAL	*	**5900.0**	**200.0**	**960.0**	**30**

* VOLUMES PART OF ROADWAY TOTALS IN SURFACING MATERIALS SUMMARY

LANDSCAPING AND SLOPE PROTECTION

ITEM NO.	641. *	643.22	645.119	645.482	645.512	645.611	646.2	647.1
ITEM	LOAM	FERTILIZER FOR REFERTILIZATION	MULCH WITH TACKIFERS	STUMP GRINDINGS FOR TEMPORARY EROSION CONTROL	COMPOST SOCK FOR PERIMETER BERM	BONDED FIBER MATRIX (BFM)	TURF ESTABLISHMENT WITHOUT MULCH	HUMUS
UNIT	CY	TON	A	CY	LF	LB	A	CY
NH ROUTE 125	1216.4	1.00	1.10	950.0	1800.0	4323.90	2.20	---
SERVICE ROAD	28.1	0.90	1.00	215.0	1177.2	3927.27	2.00	1075.00
ACCESS ROAD	89.8	0.10	0.08	75.0	100.0	333.93	0.20	---
OLD ROAD	74.0	0.10	0.07	20.0	50.0	269.90	0.10	---
SUBTOTAL	**1408.3**	**2.1**	**2.3**	**1260.0**	**3127.2**	**8855.0**	**4.5**	**1075.0**
ROUNDING	41.7	0.4	0.2	0.0	22.8	45.0	0.5	25.0
TOTAL	**1450**	**2.5**	**2.5**	**1260**	**3150**	**8900**	**5**	**1100**

* FROM LOAM SUMMARY TABLE

NON-PARTICIPATING WATERLINE ITEMS

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY
206.19	COMMON STRUCTURE EXCAVATION EXPLORATORY	CY	100
611.05206	6" CEMENT LINED DUCTILE IRON WATER PIPE, CL 52	LF	390
611.05208	8" CEMENT LINED DUCTILE IRON WATER PIPE, CL 52	LF	360
611.05212	12" CEMENT LINED DUCTILE IRON WATER PIPE, CL 52	LF	20
611.21412	12" PVC DR14 WATER PIPE	LF	3230
611.70006	6" FITTING	EA	3
611.70008	8" FITTING	EA	2
611.70012	12" FITTING	EA	14
611.71006	6" GATE VALVE	EA	3
611.71008	8" GATE VALVE	EA	3
611.71012	12" GATE VALVE	EA	5
611.81	HYDRANTS	EA	5
611.811	ADJUSTING/RELOCATING HYDRANTS	EA	2
611.90001	ADJUST WATER GATES AND SHUTOFFS SET BY OTHERS	EA	15
611.9512	WATER MAIN INSULATION, 2 IN.	SY	70

SIGNING

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
615.03	TRAFFIC SIGN TYPE C (F)	SF	430
615.034	RELOCATING TRAFFIC SIGN, TYPE C	U	6
615.06	TRAFFIC SIGN TYPE CC (F)	SF	168.2

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/3/2015	51272.01	10044GSUM	10044G	16	179

SUMMARY OF QUANTITIES (ESTIMATE)

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SURFACING MATERIALS

ITEM NO.	304.1	304.4	304.41	304.45	403.11002	403.11902	403.12	403.4	403.6	403.99	417.	628.2
ITEM	SAND (F)	CRUSHED STONE (FINE GRADATION) (F)	CRUSHED STONE (FINE GRADATION) FOR SHIMMING	CRUSHED STONE (FINE GRADATION) FOR DRIVES	HOT BITUMINOUS PAVEMENT, MACHINE METHOD (QC/QA TIER 2)	HIGH STRENGTH HOT BITUMINOUS PAVEMENT (QC/QA - TIER 2)	HOT BITUMINOUS PAVEMENT, HAND METHOD	MATERIAL TRANSFER VEHICLE (MTV)	PAVEMENT JOINT ADHESIVE	TEMPORARY BITUMINOUS PAVEMENT	COLD PLANING BITUMINOUS SURFACES	SAWED BITUMINOUS PAVEMENT
UNIT	CY	CY	CY	CY	TON	TON	TON	TON	LF	TON	SY	LF
NH ROUTE 125	8860	6123	3821.5	---	11718.0	3191.9	193.8	14909.9	110891.0	---	9040.4	242.0
SERVICE ROAD	3016	3482	---	---	1045.8	659.2	55.7	1705.0	18600.0	---	---	---
ACCESS ROAD	786	856	---	---	299.6	187.9	13.6	487.5	3280.0	---	---	---
OLD ROAD	415	474	---	---	143.9	121.1	3.2	265.0	2815.0	---	390.4	20.0
JOANNE DRIVE	---	---	---	---	61.3	61.3	---	122.6	---	---	---	35.0
EAST ROAD	---	---	---	---	78.7	78.7	---	157.4	---	---	---	45.0
DRIVEWAYS	---	---	---	2161.5	435.4	---	1027.4	435.4	---	---	---	3577.0
TRAFFIC CONTROL	---	143	---	---	---	---	---	---	---	73.28	---	6379.0
SUBTOTAL	**13077**	**11078**	**3821.5**	**2161.5**	**13782.6**	**4300.2**	**1293.7**	**18082.8**	**135586.0**	**73.28**	**9430.9**	**10298.0**
ROUNDING	0	0	3.5	0.5	17.4	49.8	6.3	17.2	14.0	1.72	19.1	2.0
TOTAL	**13077**	**11078**	**3825.0**	**2162.0**	**13800.0**	**4350.0**	**1300.0**	**18100.0**	**135600.0**	**75.0**	**9450.0**	**10300.0**

TREE REMOVAL

ITEM NO.	201.21	201.22
ITEM	REMOVING SMALL TREES	REMOVING LARGE TREES
UNIT	EA	EA
LOCATION		
NH ROUTE 125		
STA. 1238+08, 37.6' LT	1	
STA. 1238+29, 35.6' LT	1	
STA. 1243+23, 52.4' RT	1	
STA. 1243+73, 48.2' RT	1	
STA. 1257+70, 59.5' LT		1
STA. 1268+61, 53.4' LT	1	
STA. 1269+12, 54.6' LT	1	
STA. 1269+46, 42.3' RT	1	
STA. 1269+72, 43.7' RT	1	
STA. 1269+96, 44.4' RT	1	
STA. 1270+19, 45.0' RT	1	
SUBTOTAL	**10**	**1**
ROUNDING	0	0
TOTAL	**10**	**1**

TEMPORARY EROSION CONTROL

ITEM NO.	645.3	645.44	645.51	645.531
ITEM	EROSION STONE	TEMPORARY SLOPE STABILIZATION TYPE D (WILDLIFE FRIENDLY)	HAY BALES FOR TEMPORARY EROSION CONTROL	SILT FENCE
UNIT	TON	SY	EA	LF
NH ROUTE 125	---	233.0	25.0	8206.0
SERVICE ROAD	---	97.6	---	4680.0
ACCESS ROAD	---	---	---	1074.0
OLD ROAD	---	---	---	1300.0
DRAINAGE STRUCTURES	2205.0	---	---	---
SUBTOTAL	**2205.0**	**330.6**	**25.0**	**15260.0**
ROUNDING	0.0	4.4	0.0	40.0
TOTAL	**2205**	**335**	**25**	**15300**

ITEM 650.2 LANDSCAPING — 1 UNIT

LOCATION	LABEL	DESCRIPTION	SIZE	UNIT	QUANTITY
NH 125		MALUS, 'CANDYMINT' CANDYMINT CRABAPPLE	2.5" CAL	EA	5
		PRUNUS SARGENTII, 'PINK FLAIR', PINK FLAIR SARGENT CHERRY	2.5" CAL	EA	5
		COTONEASTER ADPRESSUS PRAECOX, 'TOM THUMB', TOM THUMB COTONEASTER	1.5' 1 YR PC	EA	93
		FORSYTHIA. 'GOLD TIDE', GOLD TIDE FORSYTHIA	2' 1 YR PC	EA	144
		MYRICA PENSYLVANCIA, NORTHERN BAYBERRY	2' 1 YR PC	EA	150
		PRUNUS MARITIMA, BEACH PLUM	2' 1 YR PC	EA	210
		ROSA, 'RAINBOW KNOCKOUT' ROSE	2' 1 YR PC	EA	132
		ROSA, 'BLUSHING KNOCKOUT' ROSE	2' 1 YR PC	EA	66
		ROSA, 'KNOCKOUT' ROSE	2' 1 YR PC	EA	198
		ROSA, 'WHITE OUT' ROSE	2' 1 YR PC	EA	198
		VIBURNUM NUDUM 'WINTERTHUR, WINTERTHUR VIBURNUM	2' 1 YR PC	EA	162
		CRATAEGUS LAEVIGATA, 'CRIMSON CLOUD', CRIMSON CLOUD HAWTHORN	2.5" CAL	EA	5
		SYRINGA MEYERI, 'PALIBIN', DWARF KOREAN LILAC	3' 1 YR PC	EA	72
		SYRINGA, 'TINKERBELLE', TINKERBELLE LILCA	2' 1 YR PC	EA	120
		POTENTILLA FRUITICOSA, 'GOLD STAR', GOLD STAR POTENTILLA	2' 1 YR PC	EA	40
		SPIREA X MEDIA, 'SNOW STORM', SNOW STORM SPIREA	2' 1 YR PC	EA	97
		SYRINGA RETICULA, JAPANESE TREE LILAC	2.5" CAL	EA	5
		MALUS, 'CORALBURST', CORALBURST CRABAPPLE	2.5" CAL	EA	4
		PYRUS CALLERYANNA, 'ARIST', ARISTOCRAT PEAR	2.5" CAL	EA	7
SERVICE ROAD		MALUS, 'HARVEST GOLD', HARVEST GOLD CRABAPPLE	2" CAL	EA	11
		CRATAEGUS LAEVIGATA, 'CRIMSON CLOUD', CRIMSON CLOUD HAWTHORN	2" CAL	EA	13
		SYRINGA RETICULATA, 'IVORY SILK', IVORY SILK JAPANESE LILAC TREE	2" CAL	EA	9
		PRUNUS SARGENTII, 'COLUMNARIS', COLUMNAR SARGENT CHERRY	2" CAL	EA	11
		PYRUS CALLERYANNA, 'CHANTICLEER'. CHANTICLEER FLOWERING PEAR	2" CAL	EA	11
		TOTAL			1768

Vanasse Hangen Brustlin, Inc.

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SUMMARY OF QUANTITIES (ESTIMATE)

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SIGNAL PULL BOX AND CONDUIT SCHEDULE

	ITEM NUMBERS	614.511	614.5183	614.523	614.73114	614.73118	614.73214	614.74221	
SIGNAL ID NUMBER	UNIT STATION OF REFERENCE #	CONCRETE PULL BOX 14"	30-INCH CONCRETE FIBER OPTIC MANHOLE	MOLDED PULL BOX 17"X30"	3" PVC CONDUIT, SCHEDULE 40	3" PVC CONDUIT, SCHEDULE 80	3" 2-DUCT PVC CONDUIT, SCHEDULE 40	4" 2-DUCT HDPE CONDUIT, SDR 13.5	REMARKS
		EA	EA	EA	LF	LF	LF	LF	
NH 125 AT ACCESS ROAD									
1	STA 1252+98 RT 43'	1							
1 - 4	STA 1252+98 RT 43' - STA 1253+02 RT 48'				6				
2	STA 1252+94 RT 43'			1					
2 - 5	STA 1252+94 RT 43' - STA 1253+05 RT 54'				20				
3	STA 1252+96 RT 45'		1						
3 - 4	STA 1252+96 RT 45' - STA 1253+02 RT 48'				6				
4	STA 1253+02 RT 48'								CONTROLLER CABINET
4 - 8	STA 1253+02 RT 48' - STA 1253+28 RT 52'				28				
4 - 5	STA 1253+02 RT 48' - STA 1253+05 RT 54'				6				
5	STA 1253+05 RT 54'								METER PEDESTAL
5 - 10	STA 1253+05 RT 54' - STA 1253+21 RT 47'								
6	STA 1253+09 RT 49'				18				
6 - 10	STA 1253+09 RT 49' - STA 1253+21 RT 47'						12		
7	STA 1253+24 RT 50'								PEDESTAL POLE
7 - 8	STA 1253+24 RT 50' - STA 1253+28 RT 52'				5				
8	STA 1253+28 RT 52'	1							
8 - 11	STA 1253+28 RT 52' - STA 1254+09 RT 55'					81			
9	STA 1253+04 RT 44'								PEDESTAL POLE
1 - 9	STA 1253+04 RT 44' - STA 1252+98 RT 43'				6				
10	STA 1253+21 RT 47'			1					
2 - 10	STA 1252+94 RT 43' - STA 1253+21 RT 47'				28				
11	STA 1254+09 RT 55'	1							
11 - 13	STA 1254+09 RT 55' - STA 1254+14 RT 49'				9				
13	STA 1254+14 RT 49'								TRAFFIC SIGNAL MAST ARM
14	STA 1254+60 RT 43'	1							
11 - 14	STA 1254+09 RT 55' - STA 1254+60 RT 43'				53				
15	STA 1254+60 RT 05'	1							
14 - 15	STA 1254+60 RT 43' - STA 1254+60 RT 05'					39			
16	STA 1252+98 LT 05'	1							
1 - 16	STA 1252+98 RT 43' - STA 1252+98 LT 05'					48			
17	STA 1252+76 LT 05'	1							
16 -17	STA 1252+98 LT 05' - STA 1252+76 LT 05'				22				
18	STA 1252+95 LT 46'			1					
2 - 18	STA 1252+94 RT 43' - STA 1252+95 LT 46'					90			
19	STA 1252+97 LT 44'		1						
3 - 19	STA 1252+96 RT 45' - STA 1252+97 LT 44'					92			
19 - 63	STA 1252+97 LT 44' - STA 1245+76 LT 44'							720	
20	STA 1252+98 LT 46'	1							
16 - 20	STA 1252+98 LT 05' - STA 1252+98 LT 46'					40			
20 - 21	STA 1252+98 LT 46' - STA 1253+02 LT 46'				4				
21	STA 1253+02 LT 46'								TRAFFIC SIGNAL MAST ARM
18 - 21	STA 1252+95 LT 46' - STA 1253+02 LT 46'				8				
22	STA 1253+15 LT 45'	1							
20 - 22	STA 1252+98 LT 46' - STA 1253+15 LT 45'				18				
23	STA 1254+16 LT 46'	1							
22 - 23	STA 1253+15 LT 45' - STA 1254+08 LT 46'					92			
24	STA 1254+13 LT 44'								TRAFFIC SIGNAL MAST ARM
23 - 24	STA 1254+08 LT 46' - STA 1254+13 LT 44'				6				
25	STA 1260+15 LT 43'			1					
19 - 25	STA 1252+97 LT 44' - STA 1260+15 LT 43'							718	
26	STA 1267+20 LT 43'								
25 - 26	STA 1260+15 LT 43' - STA 1267+20 LT 43'							705	
SHEET 1 SUBTOTAL		10	2	4	243	482	12	2143	

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	18	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

SIGNAL PULL BOX AND CONDUIT SCHEDULE

	ITEM NUMBERS	616.101 - TRAFFIC SIGNALS					616.141	616.151	616.161 - TRAFFIC SIGNAL (TEMP.)			616.191 - ALTERATIONS TO TRAFFIC SIGNALS			616.192	677.51012	677.51072	
SIGNAL ID NUMBER	UNIT STATION OF REFERENCE #	CONSTRUCT TYPE 1 CONCRETE FOUNDATION	CONSTRUCT TYPE 2 CONCRETE FOUNDATION	INSTALL LOOP DETECTOR	INSTALL CONTROLLER CABINET	INSTALL METER PEDESTAL	COMPUTER EQUIPMENT AND TRAFFIC SIGNAL SOFTWARE	TRAFFIC SIGNAL (FIBER OPTIC)	INSTALL TEMPORARY WOOD POLE	INSTALL TEMPORARY CONDUIT	INSTALL TEMPORARY LOOP DETECTOR	CONSTRUCT TYPE 2 CONCRETE FOUNDATION	INSTALL LOOP DETECTOR	INSTALL CONTROLLER CABINET	ALTERATIONS TO TRAFFIC SIGNALS	12-STRAND SINGLE MODE FIBER OPTIC CABLE	72-STRAND SINGLE MODE FIBER OPTIC CABLE	REMARKS
				U			U	U		U			U		U	LF	LF	
	NH 125 AT ACCESS ROAD																	
1	STA 1252+98 RT 43'			2														
1 - 4	STA 1252+98 RT 43' - STA 1253+02 RT 48'																	
2	STA 1252+94 RT 43'																	
2 - 5	STA 1252+94 RT 43' - STA 1253+05 RT 54'																	
3	STA 1252+96 RT 45'															100		100' SLACK CABLE IN MANHOLE
3 - 4	STA 1252+96 RT 45' - STA 1253+02 RT 48'															6		
4	STA 1253+02 RT 48'				1		1									25		25' SLACK CABLE AT CONTROLLER CABINET
4 - 8	STA 1253+02 RT 48' - STA 1253+28 RT 52'																	
4 - 5	STA 1253+02 RT 48' - STA 1253+05 RT 54'																	
5	STA 1253+05 RT 54'					1												METER PEDESTAL
5 - 10	STA 1253+05 RT 54' - STA 1253+21 RT 47'																	
6	STA 1253+09 RT 49'																	
6 - 10	STA 1253+09 RT 49' - STA 1253+21 RT 47'																	
7	STA 1253+24 RT 50'																	PEDESTAL POLE
7 - 8	STA 1253+24 RT 50' - STA 1253+28 RT 52'																	
8	STA 1253+28 RT 52'																	
8 - 11	STA 1253+28 RT 52' - STA 1254+09 RT 55'																	
9	STA 1253+04 RT 44'																	PEDESTAL POLE
1 - 9	STA 1253+04 RT 44' - STA 1252+98 RT 43'																	
10	STA 1253+21 RT 47'																	
2 - 10	STA 1252+94 RT 43' - STA 1253+21 RT 47'																	
11	STA 1254+09 RT 55'			2														
11 - 13	STA 1254+09 RT 55' - STA 1254+14 RT 49'																	
13	STA 1254+14 RT 49'	TYPE 1C																TRAFFIC SIGNAL MAST ARM
14	STA 1254+60 RT 43'			1														
11 - 14	STA 1254+09 RT 55' - STA 1254+60 RT 43'																	
15	STA 1254+60 RT 05'			2														
14 - 15	STA 1254+60 RT 43' - STA 1254+60 RT 05'																	
16	STA 1252+98 LT 05'			1														
1 - 16	STA 1252+98 RT 43' - STA 1252+98 LT 05'																	
17	STA 1252+76 LT 05'			2														
16 -17	STA 1252+98 LT 05' - STA 1252+76 LT 05'																	
18	STA 1252+95 LT 46'																	
2 - 18	STA 1252+94 RT 43' - STA 1252+95 LT 46'																	
19	STA 1252+97 LT 44'															50	100	100' SLACK CABLE
3 - 19	STA 1252+96 RT 45' - STA 1252+97 LT 44'															92		100' SLACK CABLE
19 - 63	STA 1252+97 LT 44' - STA 1245+76 LT 44'																720	
20	STA 1252+98 LT 46'																	
16 - 20	STA 1252+98 LT 05' - STA 1252+98 LT 46'																	
20 - 21	STA 1252+98 LT 46' - STA 1253+02 LT 46'																	
21	STA 1253+02 LT 46'		TYPE 2-36R-B															TRAFFIC SIGNAL MAST ARM
18 - 21	STA 1252+95 LT 46' - STA 1253+02 LT 46'																	
22	STA 1253+15 LT 45'																	
20 - 22	STA 1252+98 LT 46' - STA 1253+15 LT 45'																	
23	STA 1254+16 LT 46'			2														
22 - 23	STA 1253+15 LT 45' - STA 1254+08 LT 46'																	
24	STA 1254+13 LT 44'		TYPE 2 - 30R															TRAFFIC SIGNAL MAST ARM
23 - 24	STA 1254+08 LT 46' - STA 1254+13 LT 44'																	
25	STA 1260+15 LT 43'																	100' SLACK CABLE
19 - 25	STA 1252+97 LT 44' - STA 1260+15 LT 43'																718	
26	STA 1267+20 LT 43'							1									50	50' SLACK CABLE
25 - 26	STA 1260+15 LT 43' - STA 1267+20 LT 43'																705	
	SHEET 3 SUBTOTAL		--				--	--		--			--		--	273	2293	

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	19	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

SIGNAL PULL BOX AND CONDUIT SCHEDULE

	ITEM NUMBERS	614.511	614.5183	614.523	614.73114	614.73118	614.73214	614.74221	
SIGNAL ID NUMBER	UNIT STATION OF REFERENCE #	CONCRETE PULL BOX 14"	30-INCH CONCRETE FIBER OPTIC MANHOLE	MOLDED PULL BOX 17"X30"	3" PVC CONDUIT, SCHEDULE 40	3" PVC CONDUIT, SCHEDULE 80	3" 2-DUCT PVC CONDUIT, SCHEDULE 40	4" 2-DUCT HDPE CONDUIT, SDR 13.5	REMARKS
		EA	EA	EA	LF	LF	LF	LF	
NH 125 AT EAST RD/JOANNE DR									
39	STA 1232+56 LT 64'								PEDESTAL POLE
39 - 41	STA 1232+56 LT 64' - STA 1232+55 LT 72'				6				
40	STA 1232+62 LT 80'								METER PEDESTAL
41	STA 1232+55 LT 72'								CONTROLLER CABINET
41 - 42	STA 1232+55 LT 72' - STA 1232+60 LT 67'				6				
42	STA 1232+60 LT 67'		1						
42 - 46	STA 1232+60 LT 67' - STA 1232+86 LT 44'							35	
43	STA 1232+64 LT 64'								TRAFFIC SIGNAL MAST ARM
41 - 43	STA 1232+55 LT 72' - STA 1232+64 LT 64'				10				
44	STA 1232+82 LT 44'	1							
41 - 44	STA 1232+55 LT 72' - STA 1232+82 LT 44'				37				
45	STA 1232+76 LT 47'								
44 -45	STA 1232+82 LT 44' - STA 1232+76 LT 47'				5				
46	STA 1232+86 LT 44'			1					
46 - 62	STA 1232+86 LT 44' - STA 1238+80 LT 43'							615	
47	STA 1232+84 RT 05'	1							
44 - 47	STA 1232+82 LT 44' - STA 1232+84 RT 05'					50			
48	STA 1232+84 RT 43'	1							
47 - 48	STA 1232+84 RT 05' - STA 1232+84 RT 43'					38			
49	STA 1232+72 RT 44'								PEDESTAL POLE
49 - 51	STA 1232+72 RT 44' - STA 1232+55 RT 46'				18				
50	STA 1232+62 RT 48'								EXISTING TRAFFIC SIGNAL MAST ARM POLE
50 - 51	STA 1232+62 RT 48' - STA 1232+55 RT 46'				7				
51	STA 1232+55 RT 46'	1							
48 - 51	STA 1232+84 RT 43' - STA 1232+55 RT 46'				30				
52	STA 1232+52 RT 54'								PEDESTAL POLE
51 - 52	STA 1232+55 RT 46' - STA 1232+52 RT 54'				9				
53	STA 1231+95 RT 64'								EXISTING TRAFFIC SIGNAL MAST ARM POLE
53 - 55	STA 1231+95 RT 64' - STA 1231+85 RT 48'				24				
54	STA 1231+92 RT 56'								
54 - 55	STA 1231+92 RT 56' - STA 1231+85 RT 48'				11				
55	STA 1231+85 RT 48'	1							
51 - 55	STA 1232+55 RT 46' - STA 1231+85 RT 48'					70			
56	STA 1231+74 RT 43'								
55 - 56	STA 1231+85 RT 48' - STA 1231+74 RT 43'				12				
57	STA 1231+62 LT 05'	1							
57 - 58	STA 1231+62 LT 05' - STA 1231+62 LT 42'					37			
58	STA 1231+62 LT 42'	1							
58 - 60	STA 1231+62 LT 42' - STA 1231+83 LT 57'				28				
59	STA 1231+72 LT 50'								EXISTING TRAFFIC SIGNAL MAST ARM POLE
59 - 60	STA 1231+72 LT 50' - STA 1231+83 LT 57'				13				
60	STA 1231+83 LT 57'	1							
41 - 60	STA 1232+55 LT 72' - STA 1231+83 LT 57'					75			
61	STA 1231+89 LT 66'								PEDESTAL POLE
60 - 61	STA 1231+83 LT 57' - STA 1231+89 LT 66'				11				
62	STA 1238+80 LT 43'			1					
62 - 63	STA 1238+80 LT 43' - STA 1245+76 LT 44'							700	
63	STA 1245+76 LT 44'			1					
90	STA 1232+63 LT 54'								WOOD POLE FOR TEMPORARY SIGNAL
40 - 90	STA 1232+62 LT 80' - STA 1232+63 LT 54'								
91	STA 1231+82 LT 59'								WOOD POLE FOR TEMPORARY SIGNAL
92	STA 1231+86 RT 51'								WOOD POLE FOR TEMPORARY SIGNAL
55 - 92	STA 1231+85 RT 48' - STA 1231+86 RT 51'								
93	STA 1232+65 RT 47'								WOOD POLE FOR TEMPORARY SIGNAL
93 - 94	STA 1232+65 RT 47' - STA 1232+51 RT 54'								
94	STA 1232+51 RT 54'								EXISTING PULL BOX
NH 125 AT WESTVILLE RD									
SHEET 2 SUBTOTAL		8	1	3	227	270	0	1350	
SHEET 1 SUBTOTAL		10	2	4	243	482	12	2143	
SIGNAL SUBTOTAL		**18**	**3**	**7**	**470**	**752**	**12**	**3493**	
ROUNDING		0	0	0	5	3		7	
TOTAL		**18**	**3**	**7**	**475**	**755**	**12**	**3500**	

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	20	179

SUMMARY OF QUANTITIES (ESTIMATE)

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SIGNAL PULL BOX AND CONDUIT SCHEDULE

	ITEM NUMBERS	616.101 - TRAFFIC SIGNALS					616.141	616.151	616.161 - TRAFFIC SIGNAL (TEMP.)			616.191 - ALTERATIONS TO TRAFFIC SIGNALS			616.192	677.51012	677.51072	
SIGNAL ID NUMBER	UNIT STATION OF REFERENCE #	CONSTRUCT TYPE 1 CONCRETE FOUNDATION	CONSTRUCT TYPE 2 CONCRETE FOUNDATION	INSTALL LOOP DETECTOR	INSTALL CONTROLLER CABINET	INSTALL METER PEDESTAL	COMPUTER EQUIPMENT AND TRAFFIC SIGNAL SOFTWARE	TRAFFIC SIGNAL (FIBER OPTIC)	INSTALL TEMPORARY WOOD POLE	INSTALL TEMPORARY CONDUIT	INSTALL TEMPORARY LOOP DETECTOR	CONSTRUCT CONCRETE FOUNDATION	INSTALL LOOP DETECTOR	INSTALL CONTROLLER CABINET	ALTERATIONS TO TRAFFIC SIGNALS (REPROGRAM CONTROLLER)	12-STRAND SINGLE MODE FIBER OPTIC CABLE	72-STRAND SINGLE MODE FIBER OPTIC CABLE	REMARKS
		U					U	U	U			U			U	LF	LF	
NH 125 AT EAST RD/JOANNE DR																		
39	STA 1232+56 LT 64'																	PEDESTAL POLE
39 - 41	STA 1232+56 LT 64' - STA 1232+55 LT 72'																	
40	STA 1232+62 LT 80'																	METER PEDESTAL
41	STA 1232+55 LT 72'													1		25		CONTROLLER CABINET, 25' SLACK CABLE
41 - 42	STA 1232+55 LT 72' - STA 1232+60 LT 67'															6		
42	STA 1232+60 LT 67'															50	50	100' SLACK CABLE
42 - 46	STA 1232+60 LT 67' - STA 1232+86 LT 44'																35	
43	STA 1232+64 LT 64'											TYPE 2 - 30R						TRAFFIC SIGNAL MAST ARM
41 - 43	STA 1232+55 LT 72' - STA 1232+64 LT 64'																	
44	STA 1232+82 LT 44'												2					
41 - 44	STA 1232+55 LT 72' - STA 1232+82 LT 44'																	
45	STA 1232+76 LT 47'																	
44 -45	STA 1232+82 LT 44' - STA 1232+76 LT 47'																	
46	STA 1232+86 LT 44'																	
46 - 62	STA 1232+86 LT 44' - STA 1238+80 LT 43'																615	
47	STA 1232+84 RT 05'												1					
44 - 47	STA 1232+82 LT 44' - STA 1232+84 RT 05'																	
48	STA 1232+84 RT 43'												2					
47 - 48	STA 1232+84 RT 05' - STA 1232+84 RT 43'																	
49	STA 1232+72 RT 44'																	PEDESTAL POLE
49 - 51	STA 1232+72 RT 44' - STA 1232+55 RT 46'																	
50	STA 1232+62 RT 48'																	EXISTING TRAFFIC SIGNAL MAST ARM POLE
50 - 51	STA 1232+62 RT 48' - STA 1232+55 RT 46'																	
51	STA 1232+55 RT 46'												1					
48 - 51	STA 1232+84 RT 43' - STA 1232+55 RT 46'																	
52	STA 1232+52 RT 54'																	PEDESTAL POLE
51 - 52	STA 1232+55 RT 46' - STA 1232+52 RT 54'																	
53	STA 1231+95 RT 64'																	EXISTING TRAFFIC SIGNAL MAST ARM POLE
53 - 55	STA 1231+95 RT 64' - STA 1231+85 RT 48'																	
54	STA 1231+92 RT 56'																	
54 - 55	STA 1231+92 RT 56' - STA 1231+85 RT 48'																	
55	STA 1231+85 RT 48'												2					
51 - 55	STA 1232+55 RT 46' - STA 1231+85 RT 48'																	
56	STA 1231+74 RT 43'																	
55 - 56	STA 1231+85 RT 48' - STA 1231+74 RT 43'																	
57	STA 1231+62 LT 05'												1					
57 - 58	STA 1231+62 LT 05' - STA 1231+62 LT 42'																	
58	STA 1231+62 LT 42'												2					
58 - 60	STA 1231+62 LT 42' - STA 1231+83 LT 57'																	
59	STA 1231+72 LT 50'																	EXISTING TRAFFIC SIGNAL MAST ARM POLE
59 - 60	STA 1231+72 LT 50' - STA 1231+83 LT 57'																	
60	STA 1231+83 LT 57'												2					
41 - 60	STA 1232+55 LT 72' - STA 1231+83 LT 57'																	
61	STA 1231+89 LT 66'																	PEDESTAL POLE
60 - 61	STA 1231+83 LT 57' - STA 1231+89 LT 66'																	
62	STA 1238+80 LT 43'																	
62 - 63	STA 1238+80 LT 43' - STA 1245+76 LT 44'																700	
63	STA 1245+76 LT 44'																	
90	STA 1232+63 LT 54'								1		2							WOOD POLE FOR TEMPORARY SIGNAL
40 - 90	STA 1232+62 LT 80' - STA 1232+63 LT 54'									25								
91	STA 1231+82 LT 59'								1		4							WOOD POLE FOR TEMPORARY SIGNAL
92	STA 1231+86 RT 51'								1									WOOD POLE FOR TEMPORARY SIGNAL
55 - 92	STA 1231+85 RT 48' - STA 1231+86 RT 51'									4								
93	STA 1232+65 RT 47'								1		3							WOOD POLE FOR TEMPORARY SIGNAL
93 - 94	STA 1232+65 RT 47' - STA 1232+51 RT 54'									16								
94	STA 1232+51 RT 54'																	EXISTING PULL BOX
NH 125 AT WESTVILLE RD															1			
SHEET 3 SUBTOTAL		--					--	--	--			--			--	81	1400	
SHEET 4 SUBTOTAL		--					--	--	--			--			--	273	2293	
SIGNAL SUBTOTAL		**1**					**1**	**1**	**1**			**1**			**1**	**354**	**3693**	
ROUNDING		0					0	0	0			0			0	6	7	
TOTAL		**1**					**1**	**1**	**1**			**1**			**1**	**360**	**3700**	

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

Vanasse Hangen Brustlin, Inc.

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	21	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

PAVEMENT MARKINGS

ITEM NO.	632.0104	632.0106	632.0118	632.02	632.3104	632.3106	632.3118	632.32	632.911	632.912	632.92
ITEM	RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE	RETROREFLECTIVE PAINT PAVE. MARKING, 6" LINE	RETROREFLECTIVE PAINT PAVE. MARKING, 18" LINE	RETROREFLECTIVE PAINT PAVEMENT MARKING, SYMBOL OR WORD	RETROREFLECT. THERMOPLAS. PAVE. MARKING, 4" LINE	RETROREFLECT. THERMOPLAS. PAVE. MARKING, 6" LINE	RETROREFLECT. THERMOPLAS. PAVE. MARKING, 18" LINE	RETROREFLECT. THERMOPLAS. PAVEMENT MARKING, SYMBOL OR WORD	OBLITERATE PAVE. MARKING LINE, 12" WIDE AND UNDER	OBLITERATE PAVE. MARKING LINE, OVER 12" WIDE	OBLITERATE PAVEMENT MARKING, SYMBOL OR WORD
UNIT	LF	LF	LF	SF	LF	LF	LF	SF	LF	LF	SF
NH ROUTE 125	111747.0	936.0	292.0	1343.0	3024.0	468.0	146.0	574.6	28378.0	146.0	574.6
SERVICE ROAD	35212.0	336.0	94.0	---	---	168.0	47.0	---	8971.0	47.0	---
ACCESS ROAD	21856.0	344.0	150.0	68.0	68.0	172.0	75.0	34.0	5886.0	75.0	34.0
OLD ROAD	12104.0	220.0	38.0	---	---	110.0	19.0	---	3136.0	19.0	---
JOANNE DRIVE	432.0	212.0	40.0	---	---	106.0	20.0	---	214.0	20.0	---
EAST ROAD	772.0	244.0	52.0	---	---	122.0	26.0	96.9	315.0	26.0	96.9
TRAFFIC CONTROL	31410.0	---	---	---	---	---	---	---	19110.0	---	---
SUBTOTAL	**213533.0**	**2292.0**	**666.0**	**1411.0**	**3092.0**	**1146.0**	**333.0**	**705.5**	**66010.0**	**333.0**	**706.00**
ROUNDING	67.0	8.0	4.0	9.0	8.0	4.0	7.0	4.5	40.0	17.0	14.0
TOTAL	**213,600**	**2,300**	**670**	**1,420**	**3,100**	**1,150**	**340**	**710**	**66,050**	**350**	**720**

PERMANENT CONSTRUCTION SIGNS AND WARNING DEVICES

(MINIMUM REQUIREMENTS - SUBSIDIARY TO ITEM 619.1)

SIGN NO.	DESCRIPTION	SIZE (FT)	SF	NO. REQ	TOTAL AREA	POSTS	PORTABLE SIGN SUPPORTS	REMARKS
G20-2a	END ROAD WORK	2X4	8	9	72	18		
OM1-3	OBJECT MARKER	1.5X1.5	2.25	3	6.75		*	* MOUNT BELOW R4-7
R3-2	LEFT TURN PROHIBITION	2X2	4	1	4		*	* MOUNT BELOW R6-1R
R3-8(14)	LANE USE (LEFT/THRU-RT)	2.5X3	7.5	2	15	2		
R4-7	KEEP RIGHT (SYMBOL)	2X2.5	5	3	15	3		
R6-1R	ONE WAY ARROW (RIGHT)	1X3	3	1	3	1		
R11-2	ROAD CLOSED	2.5X4	10	4	40		*	* MOUNT ON TYPE III BARRICADE
R50-1	NH LAW WORK ZONE	4X6	24	2	48	4		
R200S	UNAUTHORIZED TRAVEL PROHIBITED	2X4	8	5	40	10		
W1-4L	REVERSE CURVE LEFT	4X4	16	2	32		2	
W1-4R	REVERSE CURVE RIGHT	4X4	16	2	32		2	
W4-2L	LANE ENDS SYMBOL (LEFT)	4X4	16	1	16	1		
W4-2aL	LEFT LANE ENDS	2X2	4	1	4	2	*	* MOUNT BELOW W4-2L
W6-3	TWO WAY TRAFFIC SYMBOL	4X4	16	2	32		2	
W9-2R	LANE ENDS MERGE RIGHT	4X4	16	1	16		1	
W14-B4	BUSINESS ENTRANCE	3X2.5	7.5	22	165		22	
W14-B5	ARROW SYMBOL	1X0.5	0.5	22	11		*	* MOUNT ON W14-B4
W20-1a	ROAD WORK AHEAD	4X4	16	11	176	22		FLUORESCENT ORANGE
W20-1c	ROAD WORK 1000 FT	4X4	16	2	32	4		FLUORESCENT ORANGE
W20-1e	ROAD WORK 1/2 MILE	4X4	16	2	32	4		FLUORESCENT ORANGE
W20-4a	ONE LANE ROAD AHEAD	4X4	16	6	96		6	
W20-7a	FLAGGER SYMBOL	4X4	16	6	96		6	
W20-7b	BE PREPARED TO STOP	4X4	16	6	96		6	
W21-5	SHOULDER WORK	4X4	16	2	32		2	
W23-2	NEW TRAFFIC PATTERN AHEAD	4X4	16	2	32		2	

NOTE : THE ESTIMATED QUANTITIES OF "PERMANENT CONTROLS" ARE HEREBY LISTED. THE CONTRACTOR IS RESPONSIBLE FOR ALL "OPERATIONAL CONTROLS" REQUIRED UNDER SECTION 619 OF THE NHDOT SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), PART VI.

DELINEATORS

ITEM NO.		621.31	621.32
ITEM	COLOR	SINGLE DELINEATOR WITH POST	DOUBLE DELINEATOR WITH POST
UNIT		EA	EA
LOCATION			
SERVICE ROAD			
STA. 103+22.5, RT	RED		1
STA. 105+10.0, RT	GREEN	1	
STA. 115+25.0, RT	RED		1
STA. 118+62.5, RT	GREEN	1	
STA. 120+37.5, LT	GREEN	1	
STA. 123+25.0, LT	RED		1
OLD ROAD			
STA. 300+35 TO 306+50, LT	WHITE	3	
SUBTOTAL		**6**	**3**
ROUNDING		1	0
TOTAL		**7**	**3**

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	22	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

DRAINAGE SUMMARY SHEET

NOTE NO.	202.31 FILL ABANDONED PIPE	202.32 FILL AND ABANDON STRUCTURE	202.41 REMOVAL OF EXISTING PIPE 0-24" DIAMETER	202.5 REMOVAL OF CATCH BASINS, DROP INLETS, AND MANHOLES	206.1 COMMON STRUCTURE EXCAVATION	209.1 GRANULAR BACKFILL	508 STRUCTURAL FILL	520.1 CONCRETE CLASS A	544.1 REINFORCING STEEL (ROADWAY)	585.3 STONE FILL, CLASS C	593.321 GEOTEXTILE; STABILIZATION CL. 2, NON-WOVEN	593.411 GEOTEXTILE, PERM CONTROL CLASS 1, NON-WOVEN	603.0001 VIDEO INSPECTION	603.00215 15" R.C. PIPE, 2000D	603.00218 18" R.C. PIPE, 2000D	603.00224 24" R.C. PIPE, 2000D	603.00230 30" R.C. PIPE, 2000D	603.00236 36" R.C. PIPE, 2000D	603.36115 15" ALUMINIZED STEEL END SECTION	603.36118 18" ALUMINIZED STEEL END SECTION	603.36130 30" ALUMINIZED STEEL END SECTION	603.80118 18" PLASTIC PIPE (CORR. INTERIOR)	603.80124 24" PLASTIC PIPE (CORR. INTERIOR)	603.80142 42" PLASTIC PIPE (CORR. INTERIOR)	603.80212 12" PLASTIC PIPE (SMOOTH INTERIOR)
	CY	CY	LF	EA	CY	CY	CY	CY	LB	CY	SY	SY	LF	LF	LF	LF	LF	LF	EA	EA	EA	LF	LF	LF	LF
E1					8	3	28	4.39	56	545.5	58	1699.4												32	
E2							42				124		76												
E3							81				254.5		163												
E4							98				301		194					194							
E5							15				43		22				22								
E6							9				36		24								1				
E7							44				230.5		147												
E8							11				46		24	24											
E9							41				232		148												
E10							11				46		24	24											
E11													145												
E12													24	24											
E13													11												
E14													143												
E15													24	24											
E16													134												
E16A													157												
E17													24	24											
E18										2.3		10.5	102	102						1					
E20					2		23				67		38				38								
E21							80				311.5		201												
E22							34				149.5		93												
E23							21				83.5		49			49									
E24							29						95												
E25													138										138		
E26													25	25											
E27					1								15									15			
E28					2								121									121			
E29													78									78			
E30													68		68										
E31													167												
E32													246												
E33													296												
E34													229												
E35													184												
E36													107												
E37													258												
E38													54												
E39													32	32											
E40													296												
E41													229												
E42													283												
E43													266												
E44													236												
E45													207												
E46													161												
E47													141												
E48													200												
E49													152												
E50													85	85											
E51													84												
E52													29	29											
E53													93												
E54													100	100						2					
E57							33				151		94												
E58							7				42		28						1						
E59					8	3	6	3.44	50	19.1	10	68.1	43.0												
E60																									
E61																									
E62																									
E63							8				20.5		7												
E64													97												
E65							41				232		148												
E66							36				222		148												
E67													47												
F1													34	34											
F2													33	33											
F3													167												
F4													13												
F5													134												
F6													147												
F7													129												
F8													120												
F9													32			32									
F10					13	2		2.58	25	26.4		91.6	42.0				42								
F11													21												
F12					2								32			32									
F13													83												
F14													32			32									
SHEET 1 SUBTOTAL	0	0	0	0	36	8	698	10.41	131	593.3	2660	1869.6	8273.0	560	68	145	102	194	1	3	1	214	138	32	0

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	23	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

DRAINAGE SUMMARY SHEET

NOTE NO.	603.80215	603.80218	603.80224	603.80230	603.80236	604.0007	604.12		604.125		604.126		604.128		604.15		604.156		604.16		604.165		604.166		604.242	604.32		604.328		604.4	604.52	604.62	604.72	604.9101	622.1	COMMENTS
	15" PLASTIC PIPE (SMOOTH INTERIOR)	18" PLASTIC PIPE (SMOOTH INTERIOR)	24" PLASTIC PIPE (SMOOTH INTERIOR)	30" PLASTIC PIPE (SMOOTH INTERIOR)	36" PLASTIC PIPE (SMOOTH INTERIOR)	POLYETHYLENE LINER	CATCH BASINS TYPE B		CATCH BASINS TYPE B, 5-FOOT DIAMETER		CATCH BASINS TYPE B, 6-FOOT DIAMETER		CATCH BASINS TYPE B, 8-FOOT DIAMETER		CATCH BASINS TYPE E		CATCH BASINS TYPE E, 6-FOOT DIAMETER		CATCH BASINS TYPE F		CATCH BASINS TYPE F, 5-FOOT DIAMETER		CATCH BASINS TYPE F, 6-FOOT DIAMETER		DROP INLETS TYPE D-B	DRAINAGE MANHOLES		DRAINAGE MANHOLES, 8-FOOT DIAMETER		RECONSTRUCTING/ ADJUSTING CATCH BASIN & DROP INLET	RECONSTRUCTING/ ADJUSTING DRAINAGE MANHOLES	DRAINAGE MANHOLE COVERS & FRAMES	GRATES & FRAMES, TYPE B	OUTLET CONTROL STRUCTURE	STEEL WITNESS MARKERS	
	LF	LF	LF	LF	LF	EA	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	U	ACT	EST	ACT	EST	LF	LF	EA	EA	U	EA	
E1																												1	1.4						1	
E2					76						1	1.4																								
E3					163						1	1.4																								
E4													1	1.3																						
E5									1	1.2																										W/ DOUBLE GRATE
E6				24																															1	
E7		147					1	1.1																												
E8							1	1																												
E9	148						1	1.1																												
E10							1	1																												
E11	145						1	1.3																												
E12							1	1																												
E13	11														1	1																			1	
E14	143						1	1.2																												
E15							1	1																												
E16	134						1	1.1																												
E16A	157						1	1.3																												
E17							1	1																												
E18																										1	1								1	
E20																	1	1.3																	1	
E21				201			1	1.3																												
E22			93						1	1.2																										W/ DOUBLE GRATE
E23									1	1.1																										W/ DOUBLE GRATE
E24			95						1	1.1																										W/ DOUBLE GRATE
E25																					1	1.1														
E26																			1	1																
E27																			1	1.1																
E28																							1	1.5												
E29							1	1.2																												
E30							1	1.1																												
E31	167						1	1																												
E32	246						1	1																												
E33	296						1	1																												
E34	229						1	1																												
E35	184						1	1																												
E36	107						1	1																												
E37	258						1	1																												
E38	54						1	1																												
E39							1	1																												
E40	296						1	1																												
E41	229						1	1																												
E42	283						1	1																												
E43	266						1	1																												
E44	236						1	1																												
E45	207						1	1																												
E46	161						1	1																												
E47	141						1	1																												
E48	200						1	1.2																												
E49	152										1	1.2																								
E50							1	1																												
E51	84						1	1.2																												
E52															1	1																				W/ SLAB TOP
E53	93						1	1.1																												
E54																																			2	
E57			94				1	1.1																												
E58	28																																		1	
E59					43																													1	1	
E60																																1				
E61																																1				
E62																																1				
E63			7				1	1.2																												
E64	97						1	1.1																												
E65	148						1	1																												
E66	148						1	1.3																												
E67	47						1	1																												
F1							1	1																												
F2							1	1.1																												
F3	167						1	1																												
F4	13														1	1																			1	
F5	134										1	1																								
F6	147						1	1																												
F7		129					1	1																												
F8	120						1	1																												
F9																														1						
F10											1	1.6																							1	
F11	21						1	1.2																												
F12							1	1.4																												
F13				83							1	1.3																								
F14									1	1.3																										
SHEET 1 SUBTOTAL	5697	276	289	308	282	0	49	52.6	5	5.9	6	7.9	1	1.3	3	3	1	1.3	2	2.1	1	1.1	1	1.5	0	1	1	1	1.4	1	0	0	3	1	11	

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

Vanasse Hangen Brustlin, Inc.

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	24	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

DRAINAGE SUMMARY SHEET

NOTE NO.	202.31 FILL ABANDONED PIPE CY	202.32 FILL AND ABANDON STRUCTURE CY	202.41 REMOVAL OF EXISTING PIPE 0-24" DIAMETER LF	202.5 REMOVAL OF CATCH BASINS, DROP INLETS, AND MANHOLES EA	206.1 COMMON STRUCTURE EXCAVATION CY	209.1 GRANULAR BACKFILL CY	508 STRUCTURAL FILL CY	520.1 CONCRETE CLASS A CY	544.1 REINFORCING STEEL (ROADWAY) LB	585.3 STONE FILL, CLASS C CY	593.321 GEOTEXTILE; STABILIZATION CL. 2, NON-WOVEN SY	593.411 GEOTEXTILE, PERM CONTROL CLASS 1, NON-WOVEN SY	603.0001 VIDEO INSPECTION LF	603.00215 15" R.C. PIPE, 2000D LF	603.00218 18" R.C. PIPE, 2000D LF	603.00224 24" R.C. PIPE, 2000D LF	603.00230 30" R.C. PIPE, 2000D LF	603.00236 36" R.C. PIPE, 2000D LF	603.36115 15" ALUMINIZED STEEL END SECTION EA	603.36118 18" ALUMINIZED STEEL END SECTION EA	603.36130 30" ALUMINIZED STEEL END SECTION EA	603.80118 18" PLASTIC PIPE (CORR. INTERIOR) LF	603.80124 24" PLASTIC PIPE (CORR. INTERIOR) LF	603.80142 42" PLASTIC PIPE (CORR. INTERIOR) LF	603.80212 12" PLASTIC PIPE (SMOOTH INTERIOR) LF
F15													21												
F16													64												
F17													101												
F18													12												
F19													26												
F20													125												
F21													183												
F22													153												
F23													203												
F24													90												
F25					9	2		2.58	43	6.3		25.2	13.0			13									
F27					2								32			32									
F28					1								36												
G1																									
G2																									
G4													88												
G6																									
G8													106												
G9													89												
G10													147												
G11													120												
G12													15												
G13													32				32								
G14					1								32				32								
G15					18	4		5.09	70	25.7		89.3	64.0												
G16													120												
G18													76												
G19																									
G20																									
G21																									
G22																									
G23																									
G24																									
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G30																									
G31																									
G32																									
G33																									
G34																									
G35																									
G36																									
G37																									
G38																									
G39																									
T1													4												4
T2													4												4
R1	4.19																								
R2	3.03	5.82																							
R3			136																						
R4			28																						
R5			156	1																					
R6	8.59		12	1																					
R7	3.86	4.19																							
R8			180	1																					
R9			24																						
R10	7.04		55	1																					
R11			53	1																					
R12	5.14		27																						
R13			303	1																					
R14			51	1																					
R15	13.68	2.33																							
R16			6	1																					
R17			49	1																					
FROM ITEM 604.12						64																			
FROM ITEM 604.125						8																			
FROM ITEM 604.126						7																			
FROM ITEM 604.128						2																			
FROM ITEM 604.15						3																			
FROM ITEM 604.156						1																			
FROM ITEM 604.16						2																			
FROM ITEM 604.165						1																			
FROM ITEM 604.166						1																			
FROM ITEM 604.32						1																			
FROM ITEM 604.328						1																			
FROM ITEM 604.4																									
FROM ITEM 604.72																									
FROM CONCRETE STEPS						2		10.87	130																
SUBGRADE STABILIZATION											3500														
SHEET 2 SUBTOTAL	45.53	12.34	1080	9	31	99	0	18.54	243	32	3500	114.47	1956	0	0	45	64	0	0	0	0	0	0	0	8
SHEET 1 SUBTOTAL	0	0	0	0	36	8	698	10.41	131	593.3	2660	1869.6	8273	560	68	145	102	194	1	3	1	214	138	32	0
SUBTOTAL	45.53	12.34	1080	9	67	107	698	28.95	374	625.3	6160	1984.1	10229.0	560	68	190	166	194	1	3	1	214	138	32	8
ROUNDING	4.47	2.66	2	0	33	3	2	1.05	6	4.7	40	0.9	21	0	2	0	4	1	0	0	0	1	2	3	2
TOTAL	50	15	1082	9	100	110	700	30	380	630	6200	1985.0	10250.0	560	70	190	170	195	1	3	1	215	140	35	10

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SUMMARY OF QUANTITIES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSUM	10044G	25	179

SUMMARY OF QUANTITIES (ESTIMATE)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

DRAINAGE SUMMARY SHEET

NOTE NO.	603.80215	603.80218	603.80224	603.80230	603.80236	604.0007	604.12		604.125		604.126		604.128		604.15		604.156		604.16		604.165		604.166		604.242	604.32		604.328		604.4	604.52	604.62	604.72	604.9101	622.1	COMMENTS
	15" PLASTIC PIPE (SMOOTH INTERIOR)	18" PLASTIC PIPE (SMOOTH INTERIOR)	24" PLASTIC PIPE (SMOOTH INTERIOR)	30" PLASTIC PIPE (SMOOTH INTERIOR)	36" PLASTIC PIPE (SMOOTH INTERIOR)	POLYETHYLENE LINER	CATCH BASINS TYPE B		CATCH BASINS TYPE B, 5-FOOT DIAMETER		CATCH BASINS TYPE B, 6-FOOT DIAMETER		CATCH BASINS TYPE B, 8-FOOT DIAMETER		CATCH BASINS TYPE E		CATCH BASINS TYPE E, 6-FOOT DIAMETER		CATCH BASINS TYPE F		CATCH BASINS TYPE F, 5-FOOT DIAMETER		CATCH BASINS TYPE F, 6-FOOT DIAMETER		DROP INLETS TYPE D-B	DRAINAGE MANHOLES		DRAINAGE MANHOLES, 8-FOOT DIAMETER		RECONSTRUCTING/ ADJUSTING CATCH BASIN & DROP INLET	RECONSTRUCTING/ ADJUSTING DRAINAGE MANHOLES	DRAINAGE MANHOLE COVERS & FRAMES	GRATES & FRAMES, TYPE B	OUTLET CONTROL STRUCTURE - 5' DIA	STEEL WITNESS MARKERS	
	LF	LF	LF	LF	LF	EA	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	ACT	EST	U	ACT	EST	ACT	EST	LF	LF	EA	EA	EA	EA	
F15			21				1	1.1																												
F16	64						1	1																												
F17			101						1	1.2																										
F18		12																												1					1	
F19	26						1	1																												
F20	125						1	1																												
F21	183						1	1																												
F22	153						1	1																												
F23	203						1	1																												
F24	90						1	1																												
F25																																			1	
F27									1	1.4																										
F28			36						1	1.4																										
G1																																	1			
G2																																	1			
G4			88				1	1.1																												
G6																																	1			
G8	106																													1			1			
G9			89				1	1.1																												
G10			147				1	1.2																												
G11			120				1	1.1																												
G12			15																												1					
G13											1	1.2																								
G14							1	1.3																												
G15					64						1	1.3																								
G16			120				1	1.1																												
G18			76																														1			
G19																																1				
G20																																1				
G21																														1						
G22																														1						
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G28																														1						
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G36																														1						
G37																														1						
G38																														1						
G39																														1						
T1																									1											
T2																									1											
R1																																				
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R15																																				
R16																																				
R17																																				
FROM ITEM 604.12						68																														
FROM ITEM 604.125						10																														
FROM ITEM 604.126						9																														
FROM ITEM 604.128						3																														
FROM ITEM 604.15						0																														
FROM ITEM 604.156						0																														
FROM ITEM 604.16						3																														
FROM ITEM 604.165						2																														
FROM ITEM 604.166						2																														
FROM ITEM 604.32																																				
FROM ITEM 604.328																																				
FROM ITEM 604.4						21																														
FROM ITEM 604.72						8																														
FROM CONCRETE STEPS																																				
SHEET 2 SUBTOTAL	950	12	813	0	64	126	14	15	3	4	2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	21	1	2	5	0	2	
SHEET 1 SUBTOTAL	5697	276	289	308	282	0	49	52.6	5	5.9	6	7.9	1	1.3	3	3	1	1.3	2	2.1	1	1.1	1	1.5	0	1	1	1	1.4	1	0	0	3	1	11	
SUBTOTAL	6647	288	1102	308	346	126	63	67.6	8	9.9	8	10.4	1	1.3	3	3	1	1.3	2	2.1	1	1.1	1	1.5	2	1	1	1	1.4	22	1	2	8	1	13	
ROUNDING	3	2	3	2	4	4	0	0.4	0	0.1	0	0.6	0	0.7	0	0	0	0.7	0	0.9	0	0.9	0	0.5	0	0	0	0	0.6	0	0	0	0	0	0	
TOTAL	6650	290	1105	310	350	130	63	68	8	10	8	11	1	2	3	3	1	2	2	3	1	2	1	2	2	1	1	1	2	22	1	2	8	1	13	

Vanasse Hangen Brustlin, Inc.

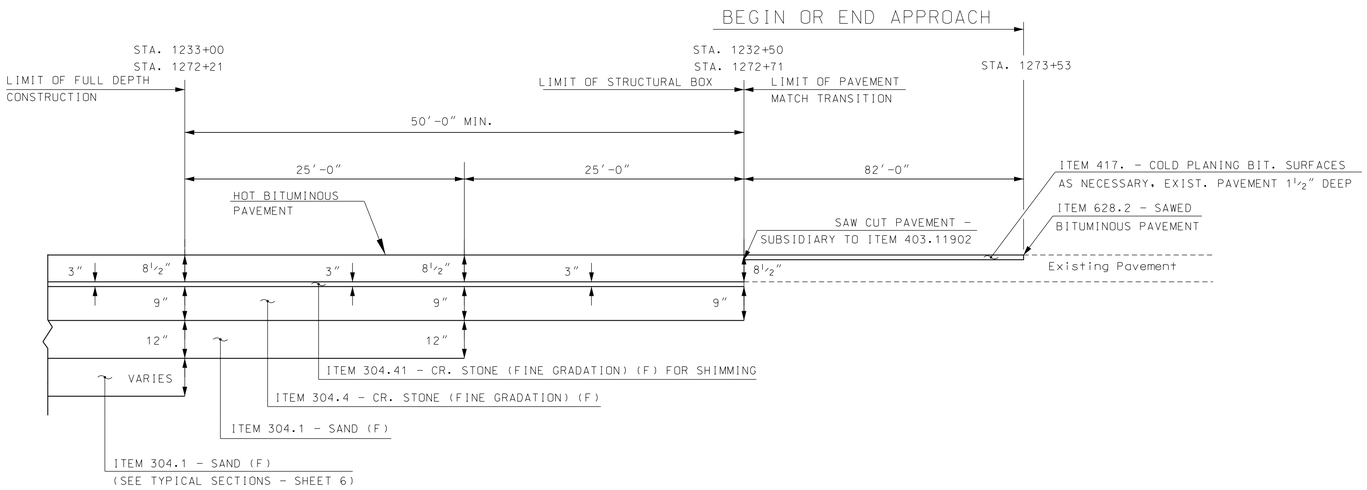
DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

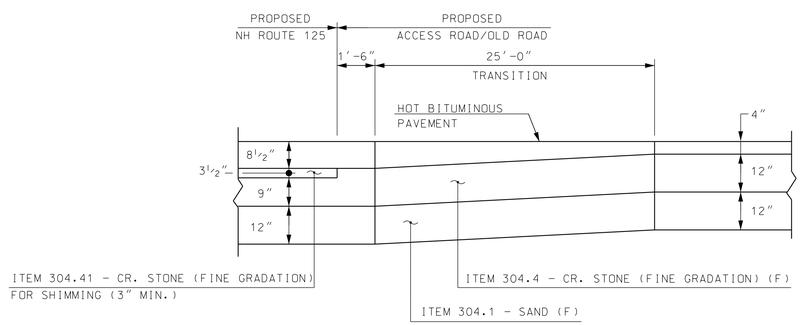
SUMMARY OF QUANTITIES

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GSUM	10044G	26	179



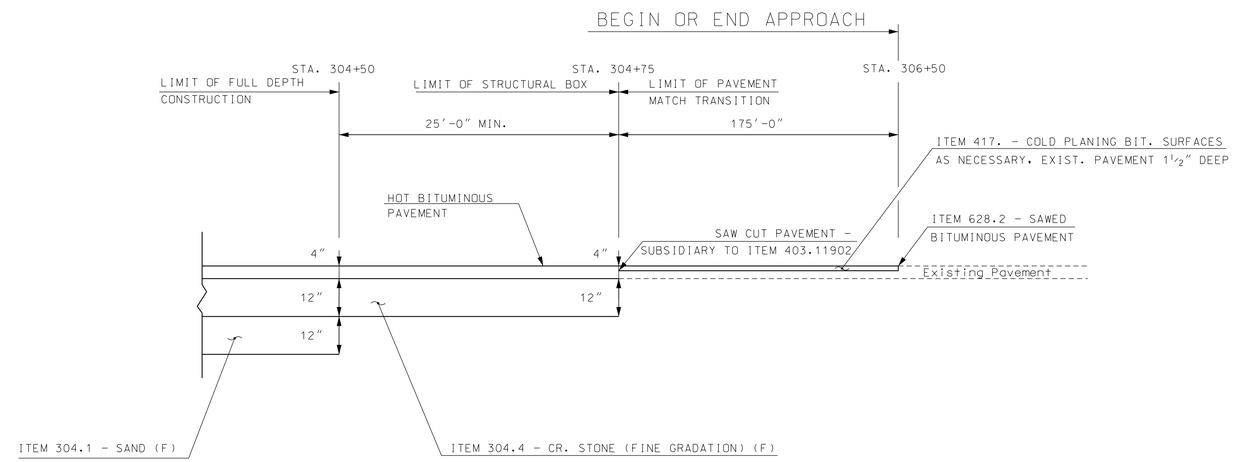
STRUCTURAL BOX AND PAVEMENT MATCH TRANSITION (NH ROUTE 125)

NOT TO SCALE



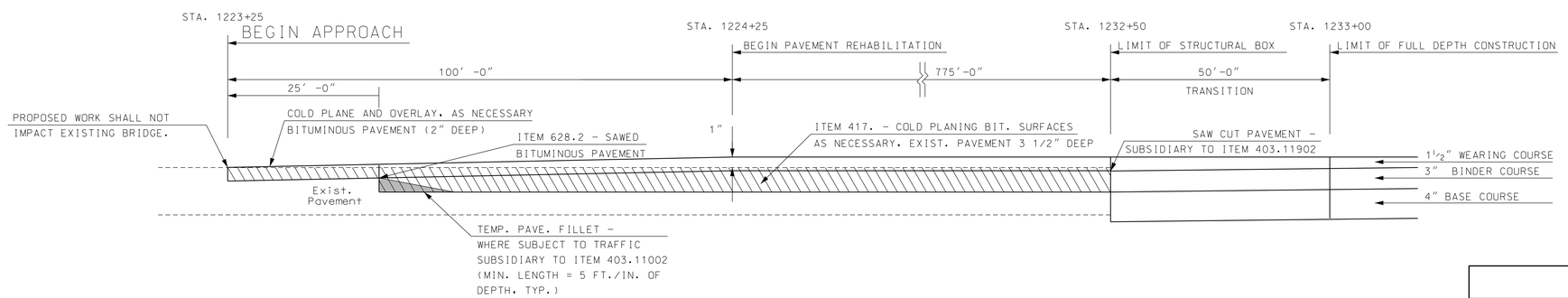
STRUCTURAL BOX AND PAVEMENT MATCH TRANSITION
(NH 125 TO ACCESS ROAD/OLD ROAD)

NOT TO SCALE



STRUCTURAL BOX AND PAVEMENT MATCH TRANSITION (OLD ROAD)

NOT TO SCALE



PAVEMENT MATCH TRANSITION AND REHABILITATION DETAIL
(NH ROUTE 125)

NOT TO SCALE

REVISIONS AFTER PROPOSAL			
DESCRIPTION	STATION	DATE	NUMBER

SDR PROCESSED VHB TEAM	DATE 7/2009	
NEW DESIGN F. KOCZALKA	DATE 9/2014	
SHEET CHECKED A. GRANDE	DATE 8/2015	
AS BUILT DETAILS	DATE	

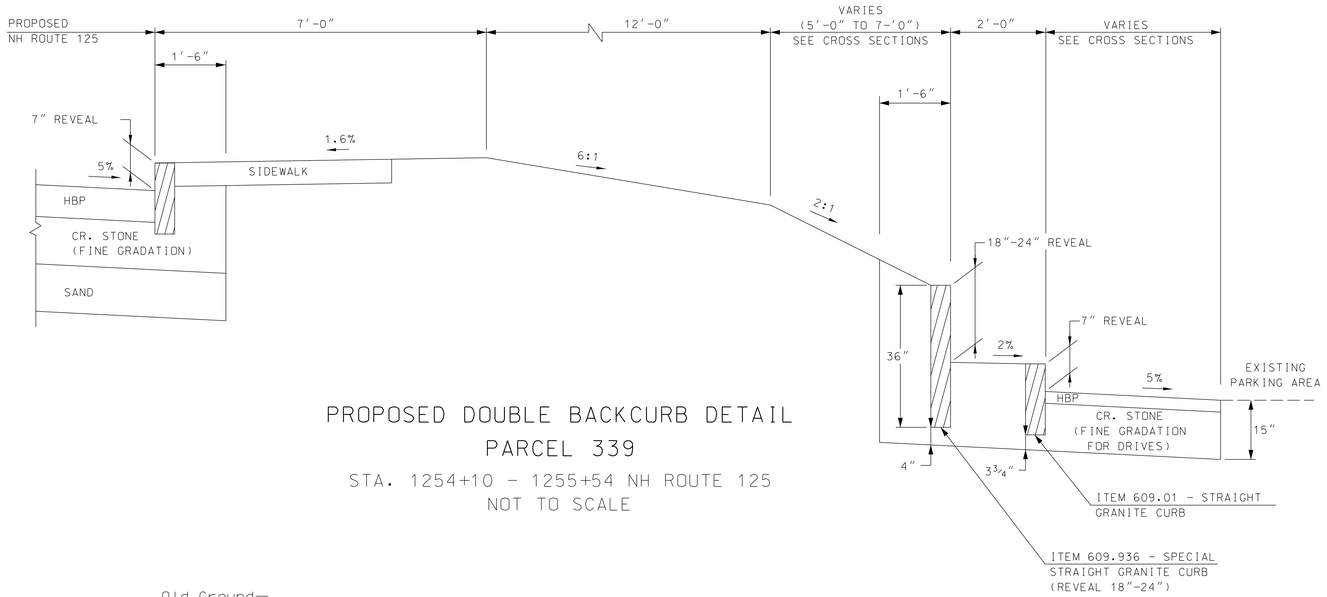
Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

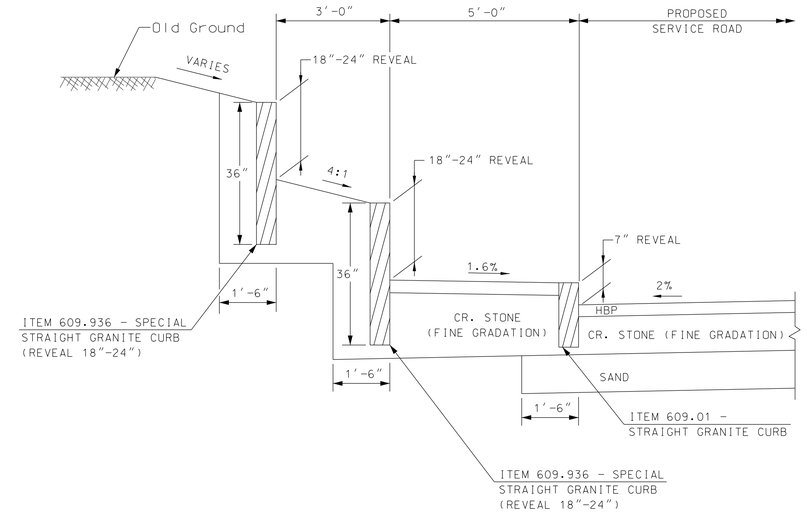
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

PAVEMENT MATCH DETAILS

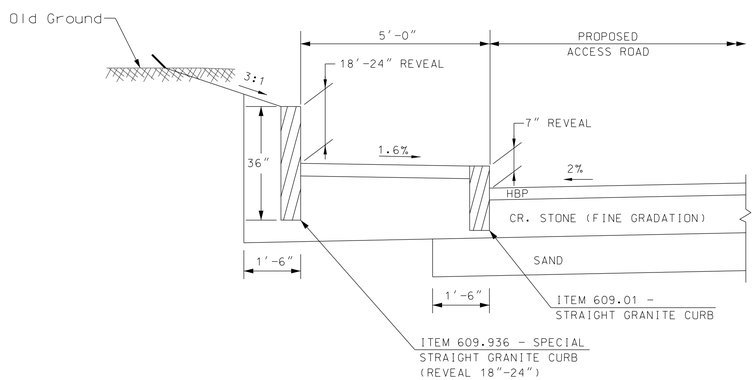
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GDRD	10044G	27	179



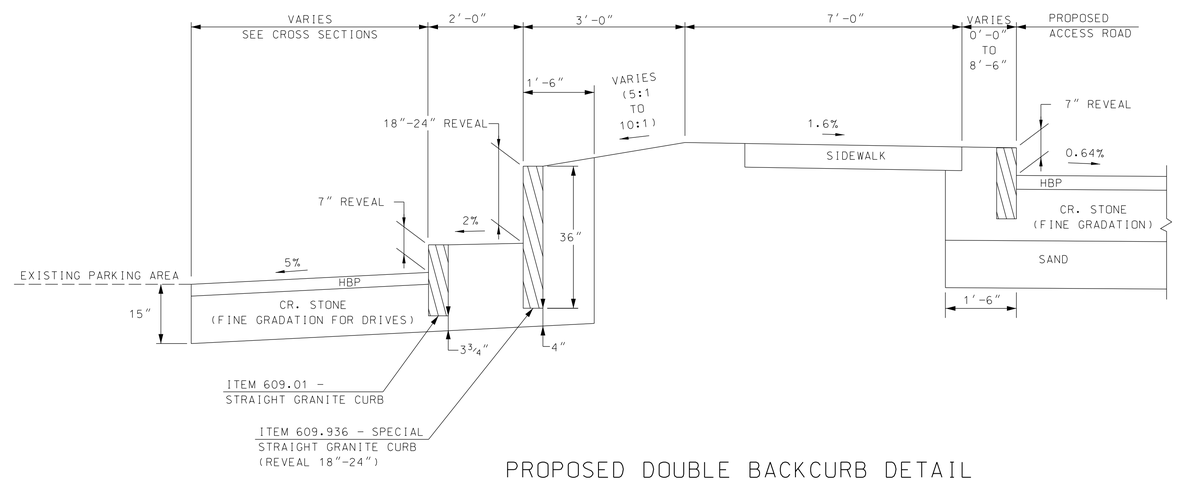
PROPOSED DOUBLE BACKCURB DETAIL
PARCEL 339
STA. 1254+10 - 1255+54 NH ROUTE 125
NOT TO SCALE



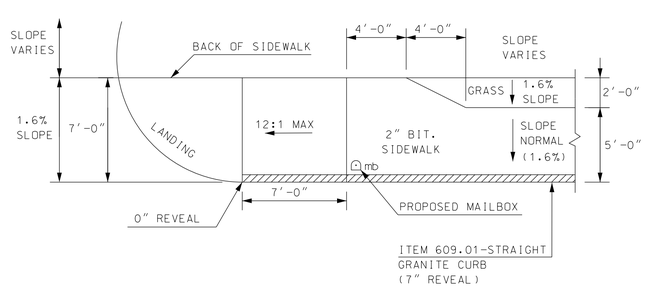
PROPOSED DOUBLE BACKCURB DETAIL
STA. 117+40 - 117+81 SERVICE ROAD
NOT TO SCALE



PROPOSED BACK CURB DETAIL
STA. 202+10 - 202+70 ACCESS ROAD
NOT TO SCALE



PROPOSED DOUBLE BACKCURB DETAIL
PARCEL 339
STA. 200+85 - 201+19 ACCESS ROAD
NOT TO SCALE



MAILBOX DETAIL AT SIDEWALK
NOT TO SCALE

NUMBER	DATE	STATION	STATION	DESCRIPTION

REVISIONS AFTER PROPOSAL

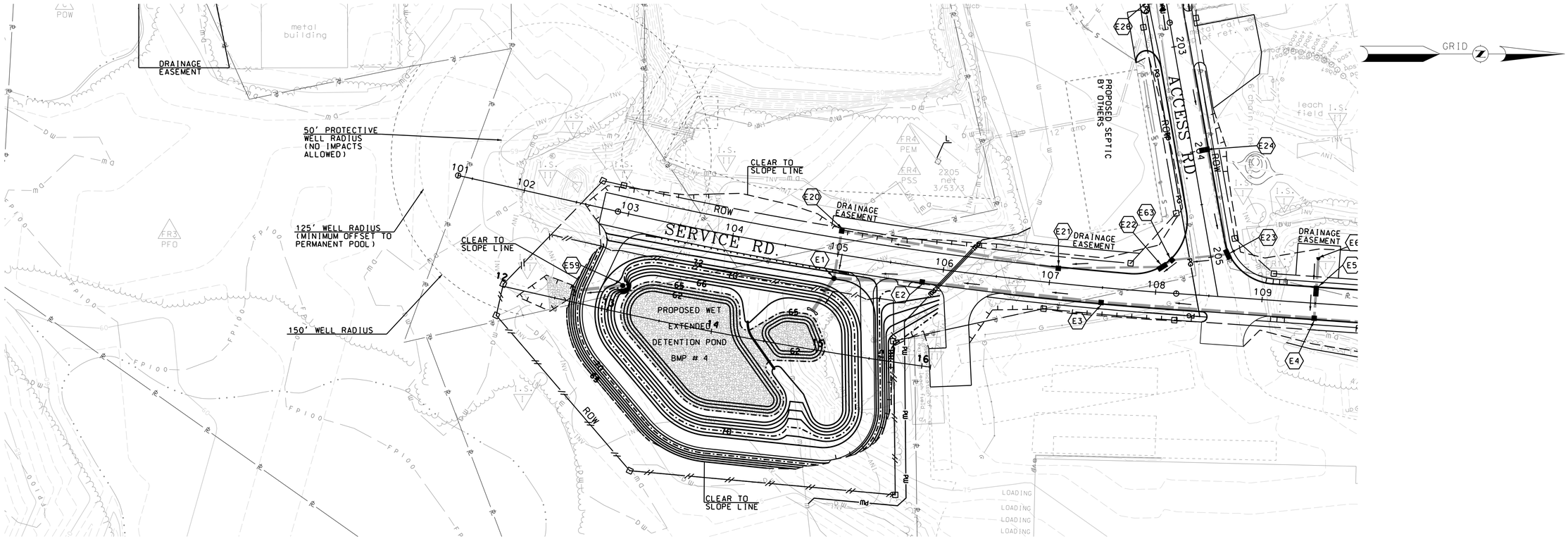
SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

ROADWAY DETAILS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GDRD	10044G	28	179

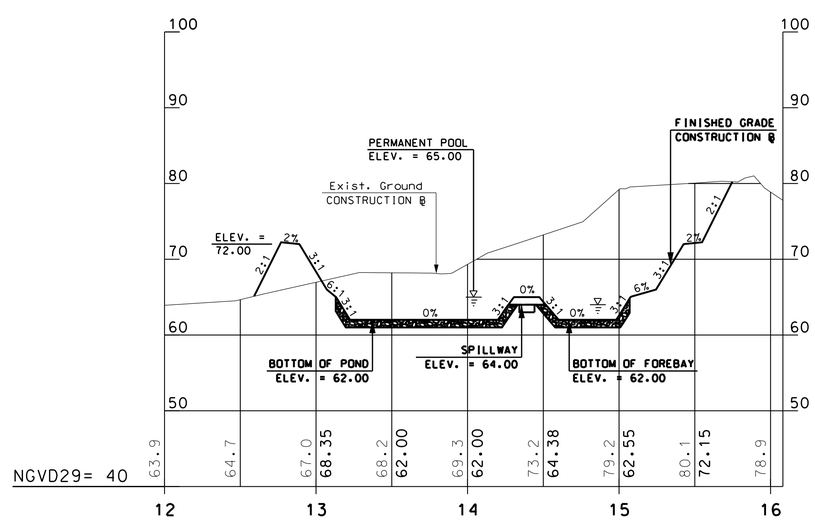


PLAN VIEW

SCALE 1"= 50'

OBSERVED GROUNDWATER TABLE		
	DATE	ELEVATION
MAX	11-2011	67.78
MIN	01-2012	67.49
AVG	N/A	67.64

MONITORING WELL
IS AT STA. 103+50, LT 100'



PROFILE

SCALE:
1"= 50' HORIZ.
1"= 10' VERT.

NOTES:

1. THE CONTRACTOR'S METHOD OF EXCAVATION AND DEWATERING FOR THE BMP CONSTRUCTION, INCLUDING THE TREATMENT AND DISPOSAL OF WATER PUMPED FROM THE EXCAVATION, SHALL BE CONDUCTED IN CONFORMANCE WITH THE CONTRACT ENVIRONMENTAL REQUIREMENTS. ALL WORK ASSOCIATED WITH THE CONSTRUCTION OF THE BMPS IN ACCORDANCE WITH THE CONTRACT ENVIRONMENTAL REQUIREMENTS INCLUDING WORK SUCH AS TEMPORARY SHEETING FOR GROUNDWATER CUTOFF, DEWATERING SYSTEMS TO PRE-DRAIN THE BMP SITE BELOW THE EXCAVATION DEPTHS, PUMPING OF WATER TO TEMPORARY TREATMENT SITES OR GEOTEXTILE FILTRATION TUBES, OR OTHER METHODS AS SELECTED BY THE CONTRACTOR SHALL BE SUBSIDIARY TO THE BMP ITEMS, AND WILL NOT BE PAID THROUGH SECTIONS 645 OR 699. THE CONTRACTOR IS ADVISED TO REVIEW THE SUBSURFACE INFORMATION AT THE BMP SITES TO ASSESS THE COST, AND THE MEANS AND METHODS OF THE BMP CONSTRUCTION.

2. THE BEST MANAGEMENT PRACTICES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES ADMINISTRATIVE RULES FOR WATER QUALITY. THE CONTRACTOR SHALL VERIFY THAT THE GRADING, PERMANENT POOL AND FOREBAY ELEVATIONS & DIMENSIONS, AND OUTLET STRUCTURE ELEVATIONS MEET THE PLANS AND BMP, DETAILS, AND SHALL BE APPROVED BY THE ENGINEER.

NUMBER	DESCRIPTION	STATION	STATION	DATE

REVISIONS AFTER PROPOSAL

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

Vanasse Hangen Brustlin, Inc.

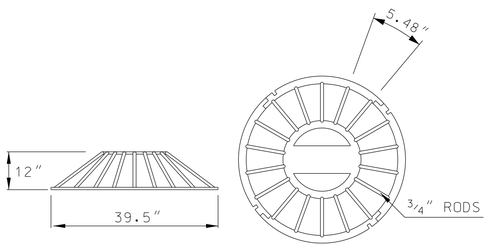
STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

BMP #4 - WET EXTENDED DETENTION POND

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GBMP	10044G	29	179

STORM ROUTING
WQV ELEV. = 65.55
2 YR. PEAK ELEV. 68.53
10 YR. PEAK ELEV. 69.72
50 YR. PEAK ELEV. 70.98



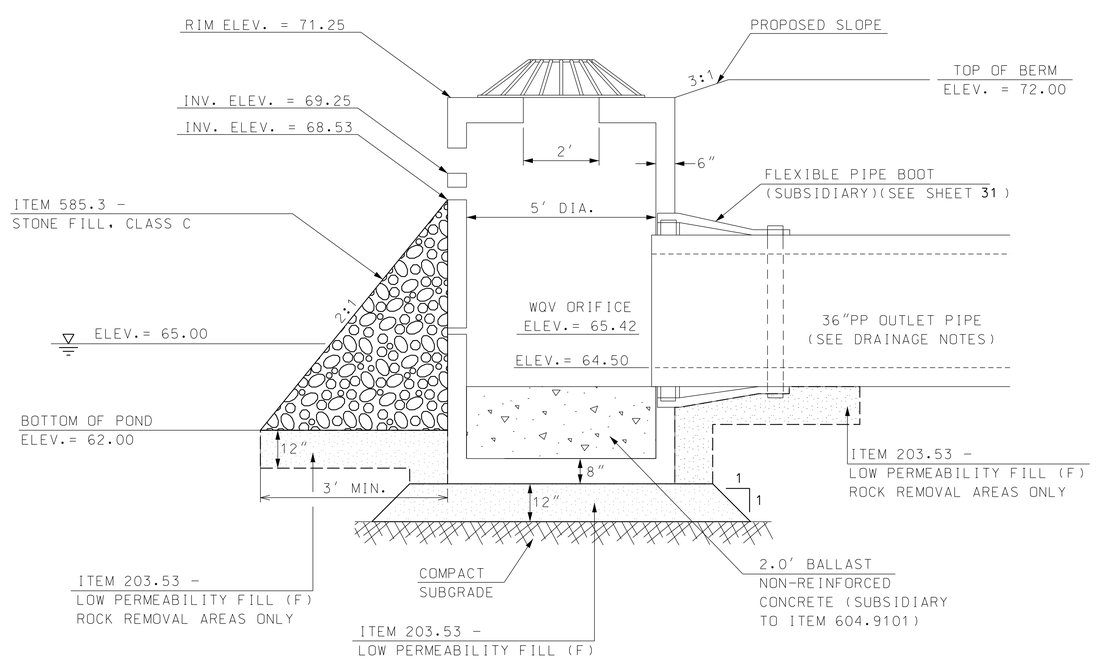
CONE GRATE TRASHRACK DETAIL
SUBSIDIARY TO ITEM 604.9101

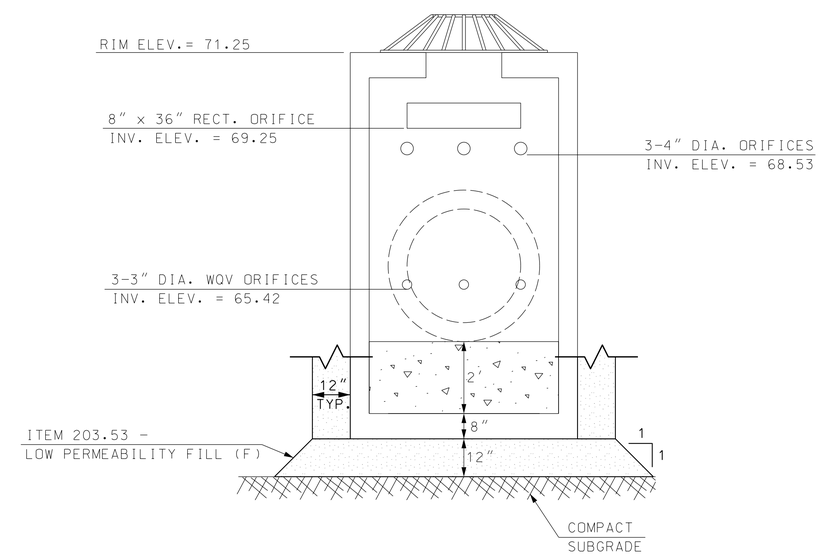
NOT TO SCALE

NOTES:
1. DIMENSIONS MAY VARY DEPENDENT UPON THE MANUFACTURER. TRASHRACK MUST ACCOMMODATE 2' DIA. OPENING IN SLAB TOP.
2. GRATE SHALL CONFORM TO SECTION 604.2.7 OF NHDOT STANDARD SPECIFICATIONS - 2010.

STRUCTURE NOTES

1. BASE SECTION SHALL BE PRECAST CONCRETE WITH MORTARED JOINTS OR CAST IN PLACE.
2. ALL COMPONENTS SHALL BE DESIGNED FOR HS-20 LOADING.
3. PROVIDE PRECAST OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE.
4. MORTAR ALL PIPE CONNECTIONS.
5. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.





* NOTE: ALL HARDWARE AND STEEL APPURTENANCES FOR THE OUTLET STRUCTURES SHALL BE GALVANIZED.

ITEM 604.9101 - OUTLET CONTROL STRUCTURE
DRAINAGE NOTE #E59

NOT TO SCALE

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED VHB TEAM	DATE 7/2009
NEW DESIGN F. KOCZALKA	DATE 9/2014
SHEET CHECKED A. GRANDE	DATE 8/2015
AS BUILT DETAILS	DATE

Vanasse Hangen Brustlin, Inc.

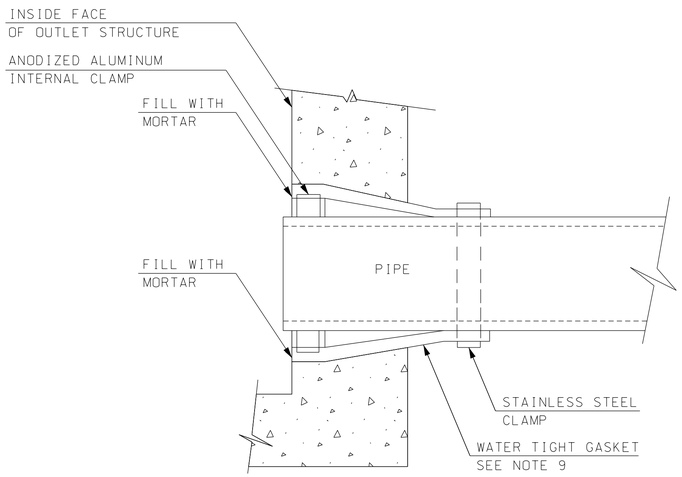
DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

DRAINAGE DETAILS
(BMP #4 - OUTLET CONTROL STRUCTURE)

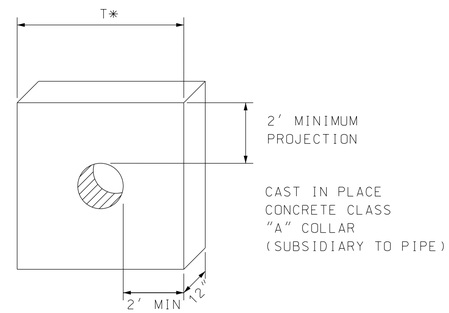
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GDDR	10044G	30	179



SEE NOTE 9

FLEXIBLE PIPE BOOT DETAIL

NOT TO SCALE

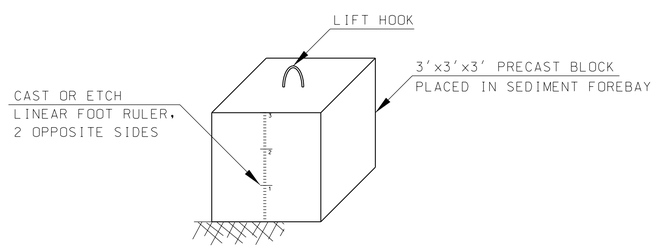


SEE NOTE 8

ANTI-SEEP COLLAR DETAIL

NOT TO SCALE

*NOTE: THE ANTI-SEEP COLLAR DIMENSION, T, SHALL EXTEND TO THE EXCAVATED TRENCH WIDTH IN ROCK AREAS, OR AS DIRECTED BY THE ENGINEER.



SEDIMENT SUMP MEASURING BLOCK

ITEM 670.02

NOT TO SCALE

* NOTE: ALL HARDWARE AND STEEL APPURTENANCES FOR THE OUTLET STRUCTURES SHALL BE GALVANIZED.

BMP GENERAL NOTES

1. THE DETENTION BASIN AREA SHALL BE CLEARED OF ALL TREES, ROOTS, STUMPS, BOULDERS AND SOD TO A DEPTH OF 1' BELOW FINAL GRADE.
2. CONSTRUCT BERM USING EMBANKMENT MATERIAL FREE OF SOD, ROOTS, FROZEN MATERIAL, NO STONES LARGER THAN 6 INCHES, OR OTHER OBJECTIONABLE MATERIAL. COMPACT AS PER STANDARD SPECIFICATIONS.
3. CONSTRUCT CUT OFF TRENCH AT CENTERLINE OF BERM OR SLIGHTLY UPSTREAM. FILL WITH LOW PERMEABILITY FILL TO REDUCE SEEPAGE AND STABILIZE THE BERM. COMPACT MATERIAL TO AT LEAST 95% OF MAXIMUM DENSITY. SEE BERM KEY DETAILS ON SHEET 32.
4. OUTLET CONTROL STRUCTURE TO BE PRECAST WITH HOLE SIZES AND SPACING AS SHOWN WITH ANY FIELD ADJUSTMENTS APPROVED BY THE CONTRACT ADMINISTRATOR. $1^1/_2$" HOLES MAY BE CORE DRILLED OR CAST WITH THE SECTION AT REQUIRED LOCATIONS. OTHER HOLES SHALL BE CAST WITH THE SECTION TO AVOID POSSIBLE RUST STAINS FROM EXPOSED REINFORCEMENT.
5. HUMUS AND SEED ALL EARTH SLOPES AS SOON AS POSSIBLE. STABILIZE THE INLET AREA WITH REQUIRED EROSION CONTROL.
6. PROVIDE ACCESS ROAD FOR REPAIR AND CLEAN OUT OF DETENTION BASIN. (SEE GRADING PLAN ON SHEET 29)
7. REMOVE ACCUMULATED SEDIMENT FROM DETENTION BASIN AT COMPLETION OF PROJECT.
8. ANTI-SEEP COLLARS SHALL BE INSTALLED AS SHOWN TO RESIST FLOW ALONG THE OUTSIDE OF THE PIPE. COLLARS SHOULD PROTECT A MINIMUM OF 2 FT. FROM THE PIPE. MAXIMUM SPACING OF COLLARS IS 20 FT. THE COST OF THE CONCRETE ANTI-SEEP COLLARS IS SUBSIDIARY TO THE OUTLET PIPE.
9. ALL PIPE CONNECTIONS SHALL HAVE FLEXIBLE WATERTIGHT GASKETS CONFORMING TO AASHTO M198. PIPE TO OUTLET STRUCTURE CONNECTION SHALL BE WATERTIGHT WITH AN EMBEDDED FLEXIBLE PIPE BOOT. (SUBSIDIARY TO PIPE ITEM)
10. ANY DETAILS NOT SHOWN ON THIS PLAN SHALL BE AS PER NHDOT STANDARD PLANS.
11. ITEM 203.53 - LOW PERMEABILITY FILL (F) SHALL BE PROVIDED WITHIN FOREBAY BERM TO SUPPORT CONCRETE CUT-OFF WALL IN SPILLWAY AND PROVIDED FOR CUT-OFF TRENCH IN BERM AREAS. ADDITIONAL ITEM 203.53 LOW PERMEABILITY FILL (F) WILL BE USED IN ROCK REMOVAL AREAS ONLY.

DRAINAGE GENERAL NOTES

1. ANTI-SEEP COLLARS TO BE PLACED, IF NEEDED, TO PREVENT MIGRATION OF GROUNDWATER CONTAMINANTS ALONG PREFERENTIAL PATHWAY CAUSED BY DRAINAGE AND/OR WATER LINE CONSTRUCTION. COLLARS SHOULD PROTECT A MINIMUM OF 2' FROM THE PIPE. MAXIMUM SPACING OF COLLARS FOR THIS USE IS 100 FT. LOCATIONS TO BE DETERMINED BY ENGINEER OR STATE CONSULTANT. COST OF CONCRETE ANTI-SEEP COLLARS IS SUBSIDIARY TO PIPE.

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

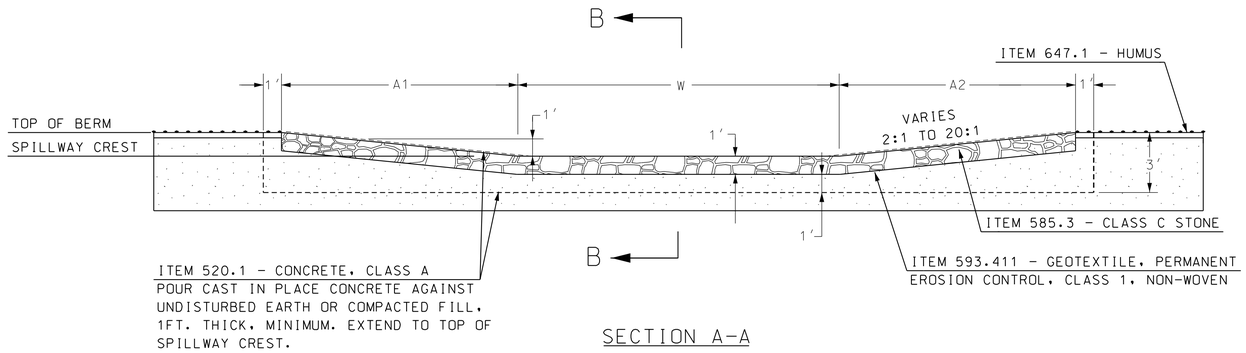
STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

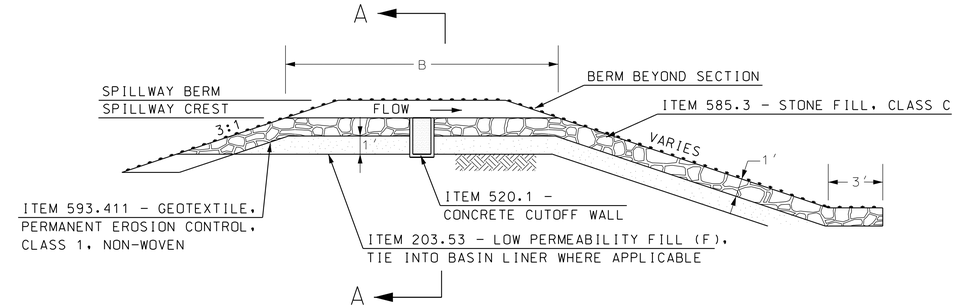
Vanasse Hangen Brustlin, Inc.

DRAINAGE DETAILS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GDDR	10044G	31	179



SECTION A-A

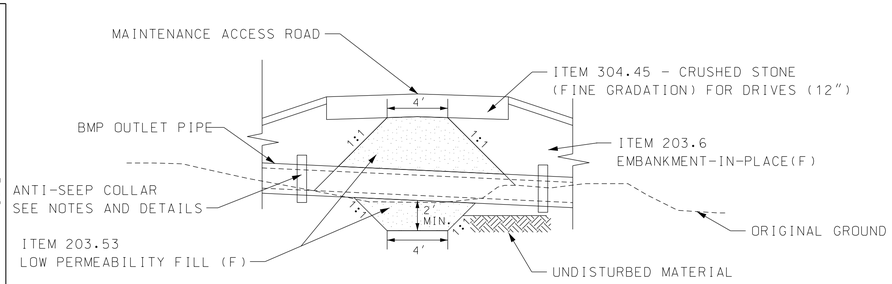


SECTION B-B

STONE SPILLWAY

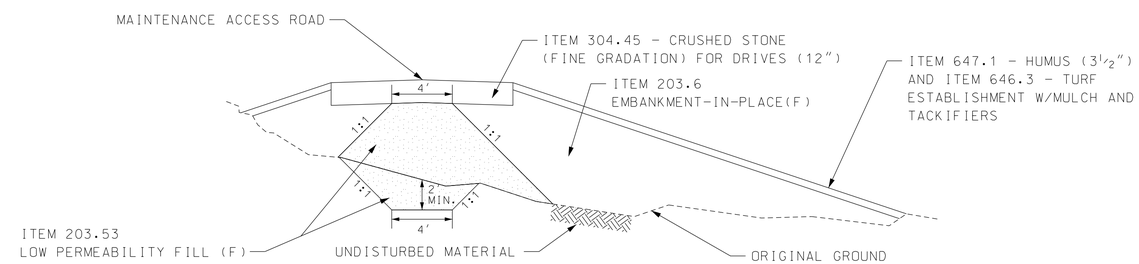
NOT TO SCALE

BASIN	LOCATION	A1 (FT)	A2 (FT)	B (FT)	W (FT)	SPILLWAY CREST ELEV.	SPILLWAY BERM ELEV.
BMP #4	FOREBAY OUTLET	3	3	12	31	64.00	65.00



BERM KEY LOW PERMEABILITY FILL DETAIL - AT OUTLET PIPE

NOT TO SCALE



BERM KEY LOW PERMEABILITY FILL DETAIL - IN FILL SECTIONS

NOT TO SCALE

NOTE: CUT OFF TRENCH TO BE USED IN BERM/DISTURBED AREAS ONLY. CONSTRUCT WITH: ITEM 203.53 - LOW PERMEABILITY FILL(F). BOTTOM TO EXTEND TO RELATIVELY IMPERVIOUS EXISTING SOIL OR 2' MIN. BELOW PIPE.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

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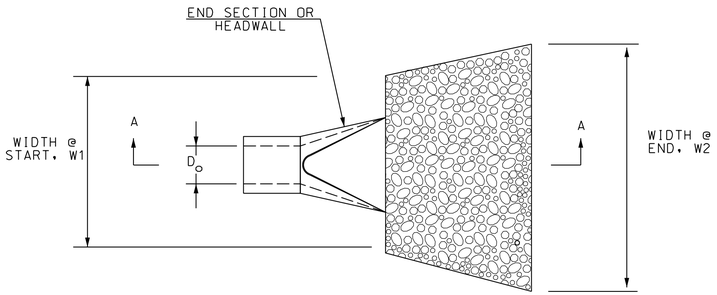
STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

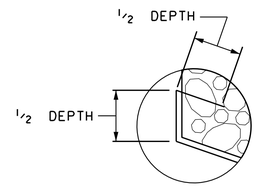
VHB Vanasse Hangen Brustlin, Inc.

DRAINAGE DETAILS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GDDR	10044G	32	179



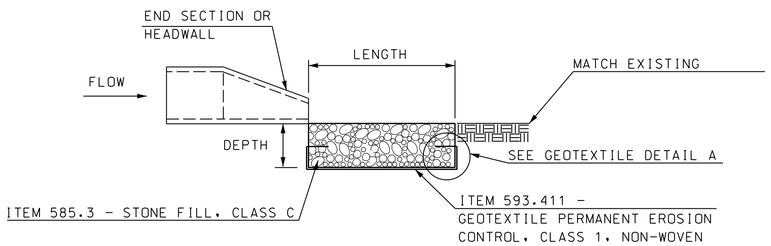
PLAN



GEOTEXTILE DETAIL A

STONE INLET/OUTLET PROTECTION CHART										
DRAINAGE NOTE NUMBER	LOCATION	W1 (ft)	W2 (ft)	LENGTH (ft)	DEPTH (ft)	A	B	BOTTOM WIDTH (ft)	DITCH DEPTH (ft)	STONE CLASS
*E1	STA. 104+85.7, RT 55.6'	11	34	58	1.0	–	–	–	–	C
E59	STA. 102+33.1, RT 98.6'	9	33	24	1.0	–	–	–	–	C
*F10	STA. 1244+42.0, RT 80.0'	20	20	36	1.0	12	1.5	2	2	C
F25	STA. 1251+63.7, LT 69.8'	6	13	18	1.0	–	–	–	–	C
*G15	STA. 1237+58.5, RT 101.1'	15	15	28	1.0	5	5	5	4	C
*E18	STA. 119+89.3, RT 40.8'	4	20	16	1.0	–	–	–	–	C

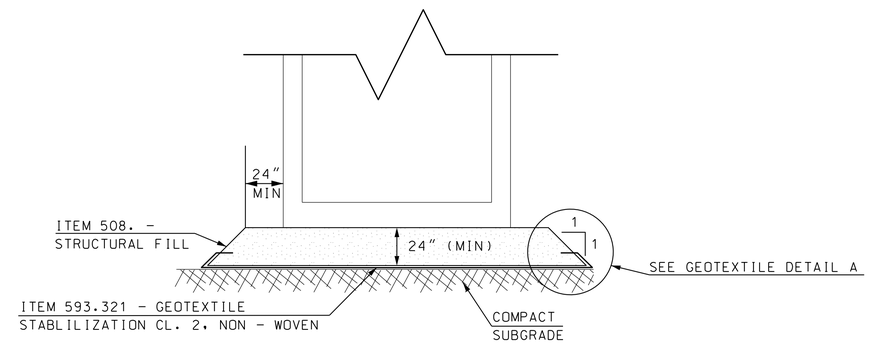
*STONE LAYOUT HAS BEEN MODIFIED FOR BMP OR TO FIT EXISTING CONDITIONS.
SEE PLANS FOR STONE LAYOUT.



SECTION A-A

STONE OUTLET PROTECTION AT PIPE OUTLET
TO FLAT AREA WITH NO DEFINED CHANNEL

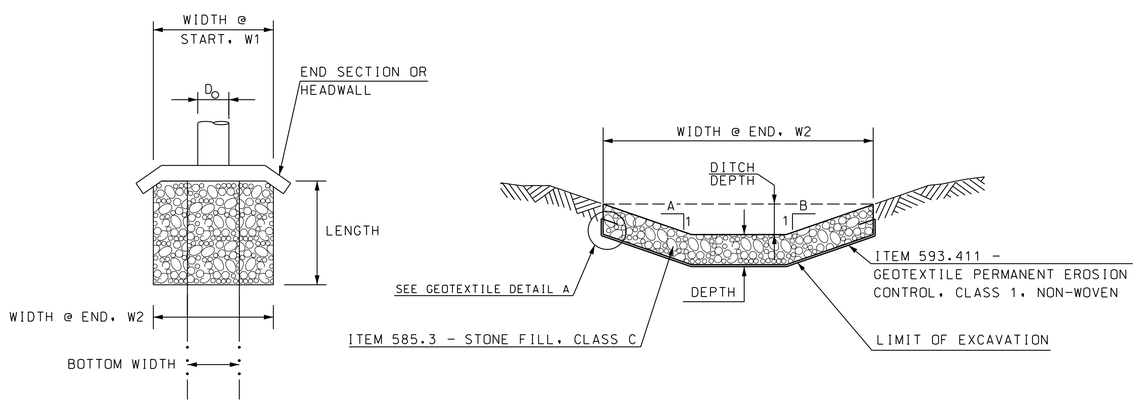
NOT TO SCALE



DRAINAGE STRUCTURE IN PRELOAD AREA DETAIL

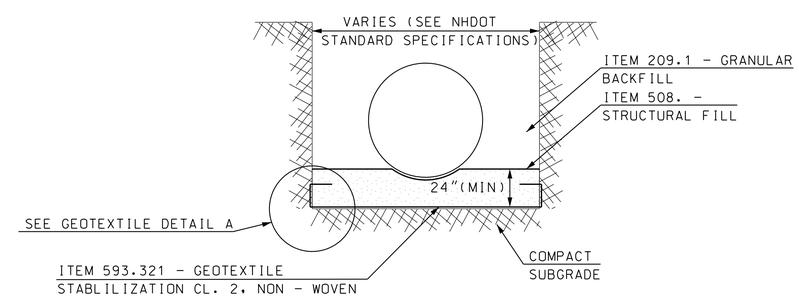
STA. 103+00 - STA. 116+00

NOT TO SCALE



STONE OUTLET PROTECTION AT PIPE OUTLET
TO A DEFINED CHANNEL

NOT TO SCALE



DRAINAGE FOR PIPE IN PRELOAD AREA DETAIL

STA. 103+00 - STA. 116+00

NOT TO SCALE

NUMBER	DATE	STATION	STATION	DESCRIPTION

REVISIONS AFTER PROPOSAL

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

Vanasse Hangen Brustlin, Inc.

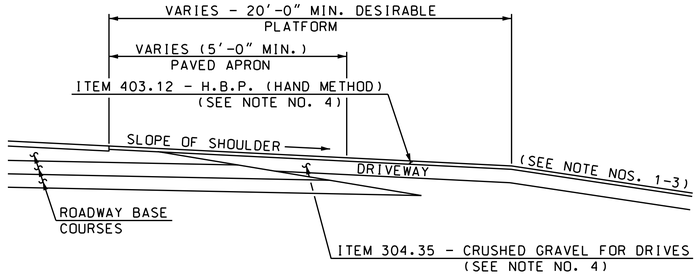
STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

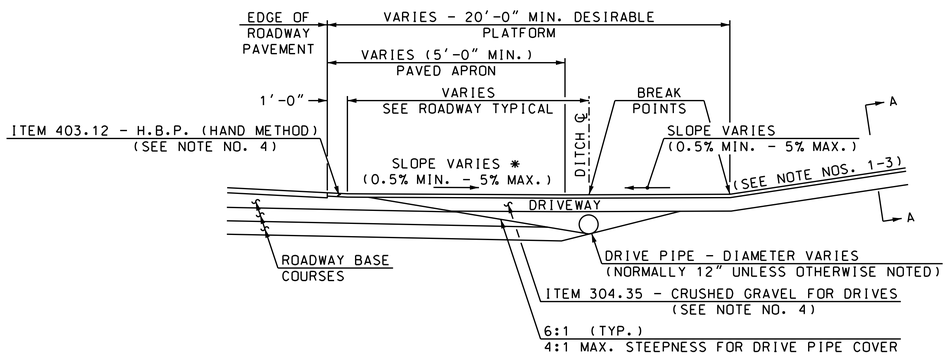
DRAINAGE DETAILS

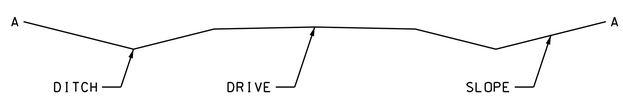
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GDDR	10044G	33	179

NOTE: REFER TO PAVEMENT LAYOUT PLANS AND CROSS-SECTIONS FOR DRIVEWAY LENGTHS, WIDTHS, RADII, CURB CUTS, GRADES AND PAVEMENT & BASE COURSE DEPTHS



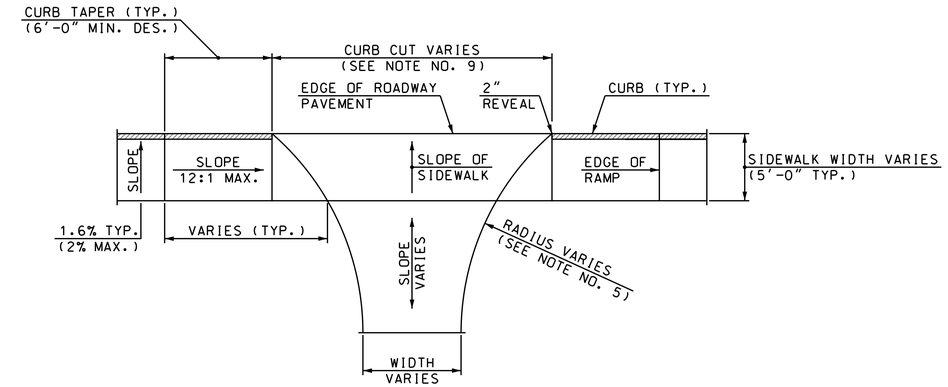
TYPICAL UNCURBED DRIVE IN FILL SECTION



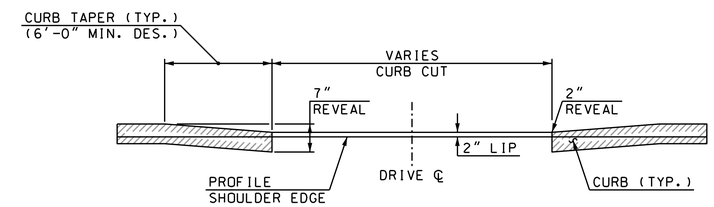


A-A DRIVEWAY CROSS-SECTION

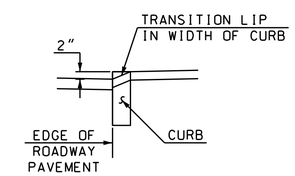
TYPICAL UNCURBED DRIVE IN CUT SECTION



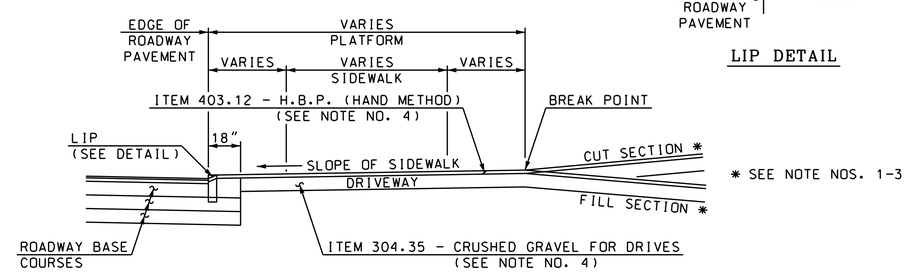
PLAN VIEW WITH SIDEWALK RAMP



END VIEW



LIP DETAIL



TYPICAL URBAN CURBED DRIVE IN CUT/FILL SECTION

GENERAL NOTES

1. GRADES OF MAJOR ENTRANCES BEYOND THE PLATFORM SHOULD NOT EXCEED 8%.
2. GRADES OF OTHER DRIVES BEYOND THE PLATFORM SHOULD NOT EXCEED 15%.
3. THE ALGEBRAIC DIFFERENCE BETWEEN TWO ADJACENT GRADES SHOULD NOT EXCEED 10%.
4. PAVEMENT AND BASE COURSE DEPTHS ARE:
   A. TYPICALLY 8" CRUSHED GRAVEL WITH 3" HBP (HAND METHOD, PLACED IN 2 COURSES) FOR RESIDENTIAL DRIVES ADJACENT TO ROADWAYS WITH CONVENTIONAL CRUSHED GRAVEL, GRAVEL, AND SAND STRUCTURAL BOX. IF THE DRIVE IS ADJACENT TO A ROADWAY WITH A CRUSHED STONE STRUCTURAL BOX, 6" OF CRUSHED STONE FINE GRADATION MAY BE SUBSTITUTED FOR THE 8" OF CRUSHED GRAVEL NOTED ABOVE.
   B. TYPICALLY 12" CRUSHED GRAVEL WITH 3" HBP (HAND METHOD, PLACED IN 2 COURSES) FOR COMMERCIAL DRIVES WITH FREQUENT HEAVY TRUCK TRAFFIC THAT ARE ADJACENT TO ROADWAYS WITH CONVENTIONAL CRUSHED GRAVEL, GRAVEL, AND SAND STRUCTURAL BOX. IF THE DRIVE IS ADJACENT TO A ROADWAY WITH A CRUSHED STONE STRUCTURAL BOX, 9" OF CRUSHED STONE FINE GRADATION MAY BE SUBSTITUTED FOR THE 12" OF CRUSHED GRAVEL NOTED ABOVE.
5. FOR DESIGN CRITERIA AND OTHER ADDITIONAL INFORMATION, REFER TO THE NHDOT DRIVEWAY MANUAL.
6. DITCHES ARE RECOMMENDED FOR UNCURBED DRIVEWAYS IN CUT SLOPES.
7. USE SLOPED END SECTIONS ON DRIVE PIPES FOR UNCURBED DRIVEWAYS.
8. CURBING CAN BE FLARED TO FIT DRIVE RADII IF APPROPRIATE OR ENDED AS DETAILED ABOVE.
9. CURB CUTS FOR RESIDENTIAL DRIVES WITH ANGLES OF ENTRY OF 75°-90° ARE TYPICALLY 25'-0".

REVISION DATE
06/04/12

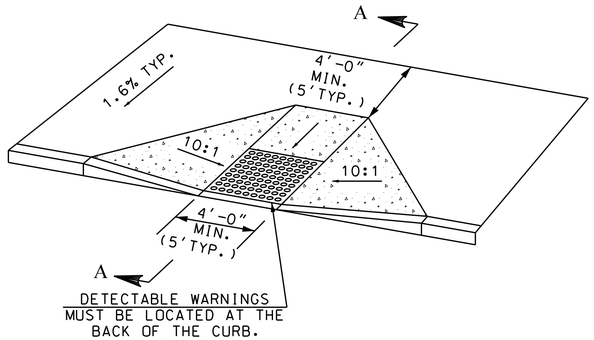
VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

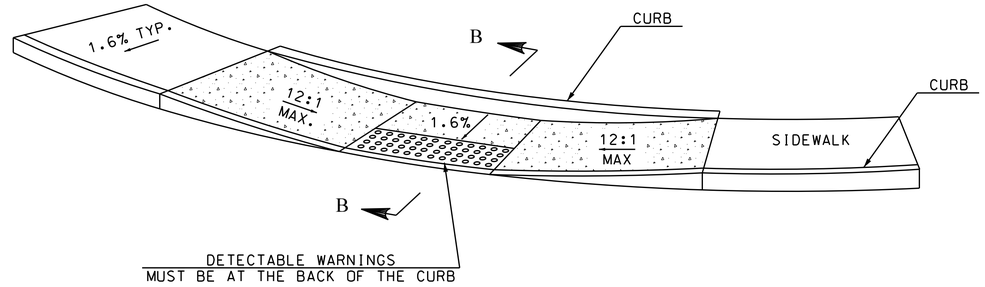
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

DRIVEWAY DETAILS

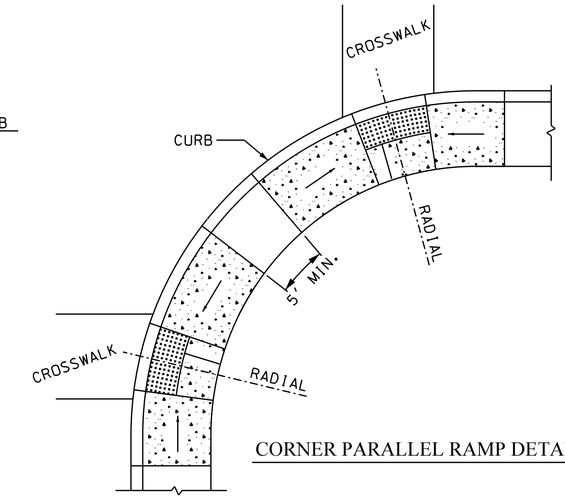
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GDT1	10044G	34	179



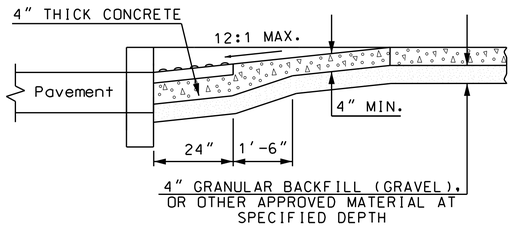
PERPENDICULAR CURB RAMP DETAIL



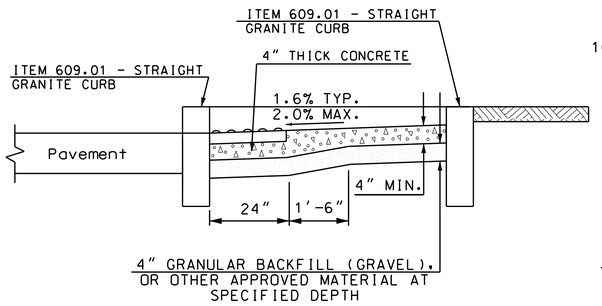
PARALLEL CURB RAMP DETAIL



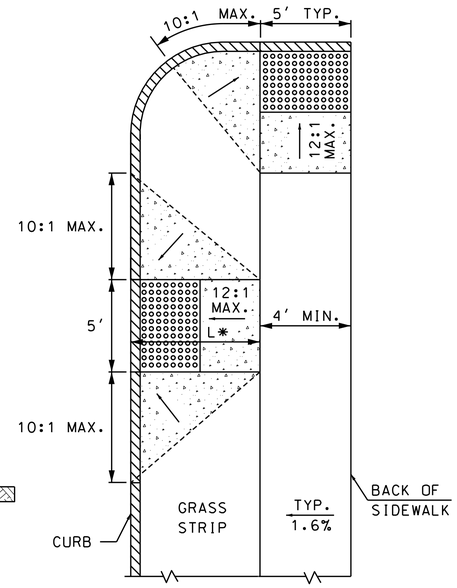
CORNER PARALLEL RAMP DETAIL



SECTION A-A



SECTION B-B



PERPENDICULAR RAMP WITH GRASS PANEL

* LENGTH OF RAMP VARIES WITH SLOPE & WIDTH OF GRASS PANEL

TRANSITION RAMPS:

BLENDED TRANSITIONS HAVE A RUNNING SLOPE GREATER THAN 2% BUT LESS THAN 5%. CURB RAMPS HAVE A RUNNING SLOPE OF 5% MIN. TO 8.33% MAX. SIDEWALK, BLENDED TRANSITIONS, AND CURB RAMPS HAVE A MAX. CROSS SLOPE OF 2%.

ALL GRADE BREAKS BETWEEN LANDINGS, RAMPS, AND BLENDED TRANSITIONS SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.

IF IT IS NECESSARY TO USE SIDEWALK WIDTHS 5'-0" OR LESS, PROVIDE A WIDENED AREA A MINIMUM OF 5'-0" WIDE BY 5'-0" LONG SPACED AT INTERVALS OF 200' MAXIMUM TO ALLOW FOR USERS TO PASS EACH OTHER.

PROVIDE DETECTABLE WARNING SURFACES ANYTIME THAT A CURB RAMP, BLENDED TRANSITION, OR LANDING CONNECTS TO A STREET. PLACEMENT FOR DETECTABLE WARNING SURFACES ARE AS FOLLOWS:

PERPENDICULAR CURB RAMPS:

WHERE BOTH ENDS OF THE BOTTOM GRADE ARE LESS THAN 5'- 0" FROM THE BACK OF THE CURB, LOCATE THE DETECTABLE WARNING PANELS ON THE RAMP SURFACE AT THE BOTTOM OF THE RAMP. WHERE EITHER END OF THE BOTTOM GRADE IS GREATER THAN 5'-0" FROM THE BACK OF THE CURB, LOCATE THE DETECTABLE WARNINGS AT THE BOTTOM OF THE LANDING.

PARALLEL CURB RAMPS:

LOCATE THE DETECTABLE WARNING SURFACES AT THE BACK OF THE CURB ALONG THE EDGE OF THE LANDING.

FOR BLENDED TRANSITIONS AND LANDINGS:

LOCATE THE DETECTABLE WARNING SURFACES AT THE BACK OF THE CURB.

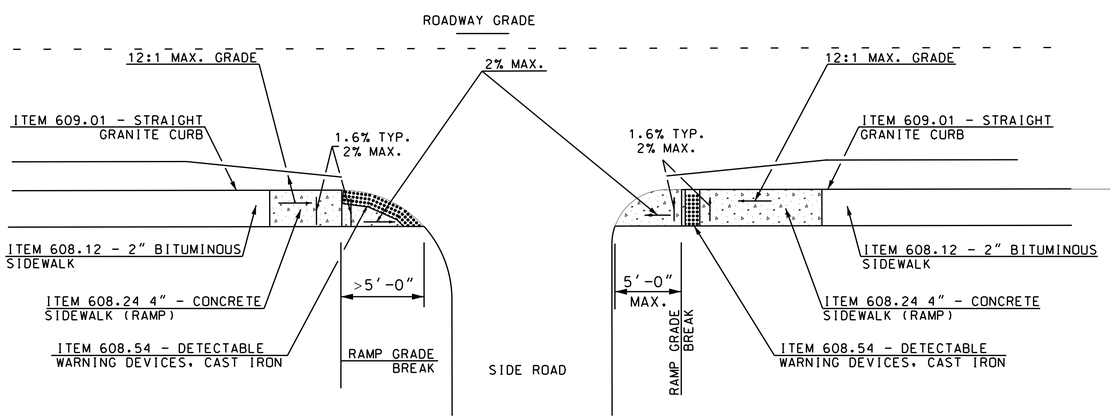
THE ORDER OF PREFERENCE FOR LOCATION OF CORNER RAMPS:

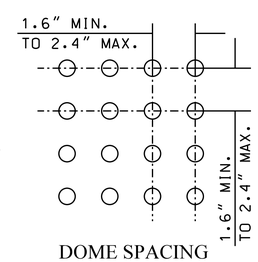
1. TWO SEPARATE RAMPS LOCATED ON TANGENT SIDEWALK AREA IMMEDIATELY OUTSIDE OF CORNER RADIUS.
2. TWO SEPARATE RAMPS SEPARATED BY 5' MINIMUM AS SHOWN ABOVE.
3. SINGLE RAMP SERVING TWO CROSSWALKS.

GENERAL NOTES

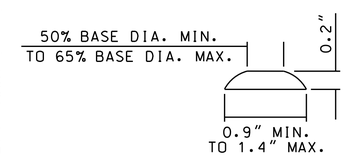
1. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1, THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.

   RAMP RUNNING SLOPE EXCEPTION: A GREATER THAN 8.33% RAMP RUNNING GRADE IS ALLOWED WHERE THE THE ROADWAY AND THE SIDEWALK(S) ARE PARALLEL AND VERY CLOSE TOGETHER, WITH THE SAME GRADE, AND USING A GRADE OF 8.33% WOULD RESULT IN A RAMP LENGTH LONGER THAN 15'. IN THOSE CIRCUMSTANCES USE A MAXIMUM RAMP LENGTH OF 15'AND THE ALLOWABLE RUNNING SLOPE OF THE RAMP(S) IS GREATER THAN 8.33%.
2. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. ROADWAY SHOULDER SLOPES ADJOINING SIDEWALK CURB RAMPS SHALL BE A MAXIMUM OF 5% (FULL WIDTH) FOR A DISTANCE OF 2 FT. FROM THE ROADWAY CURBLINE.
3. INTERCEPT DRAINAGE ALONG THE CURB IN ADVANCE OF SIDEWALK CURB RAMPS OR LANDINGS. CATCH BASINS, MANHOLES, ETC. SHALL NOT BE LOCATED IN, OR AT THE BASE OF, SIDEWALK CURB RAMPS OR LANDINGS.
4. THE BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING, EXCLUSIVE OF THE FLARED SIDES, SHALL BE WHOLLY CONTAINED WITHIN THE CROSSWALK MARKINGS.
5. THE SURFACE OF A PERPENDICULAR SIDEWALK CURB RAMP OR THE LANDING OF A PARALLEL SIDEWALK CURB RAMP SHALL CONTRAST VISUALLY WITH THE ADJOINING SIDEWALK SURFACE, EITHER ASPHALT/LIGHT-COLORED CONCRETE OR LIGHT-COLORED CONCRETE/DARK-STAINED CONCRETE. THE CONCRETE SURFACE SHALL BE SLIP RESISTANT.
6. DETECTABLE WARNING PANELS SHALL BE THE FULL WIDTH OF THE LANDING, BLENDED TRANSITION, OR CURB RAMP THEY ARE A PART OF AND SHALL BE A MINIMUM OF 2 FEET IN DEPTH. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP, BLENDED TRANSITION, OR LANDING AND THE STREET.





DOME SPACING



DOME SECTION

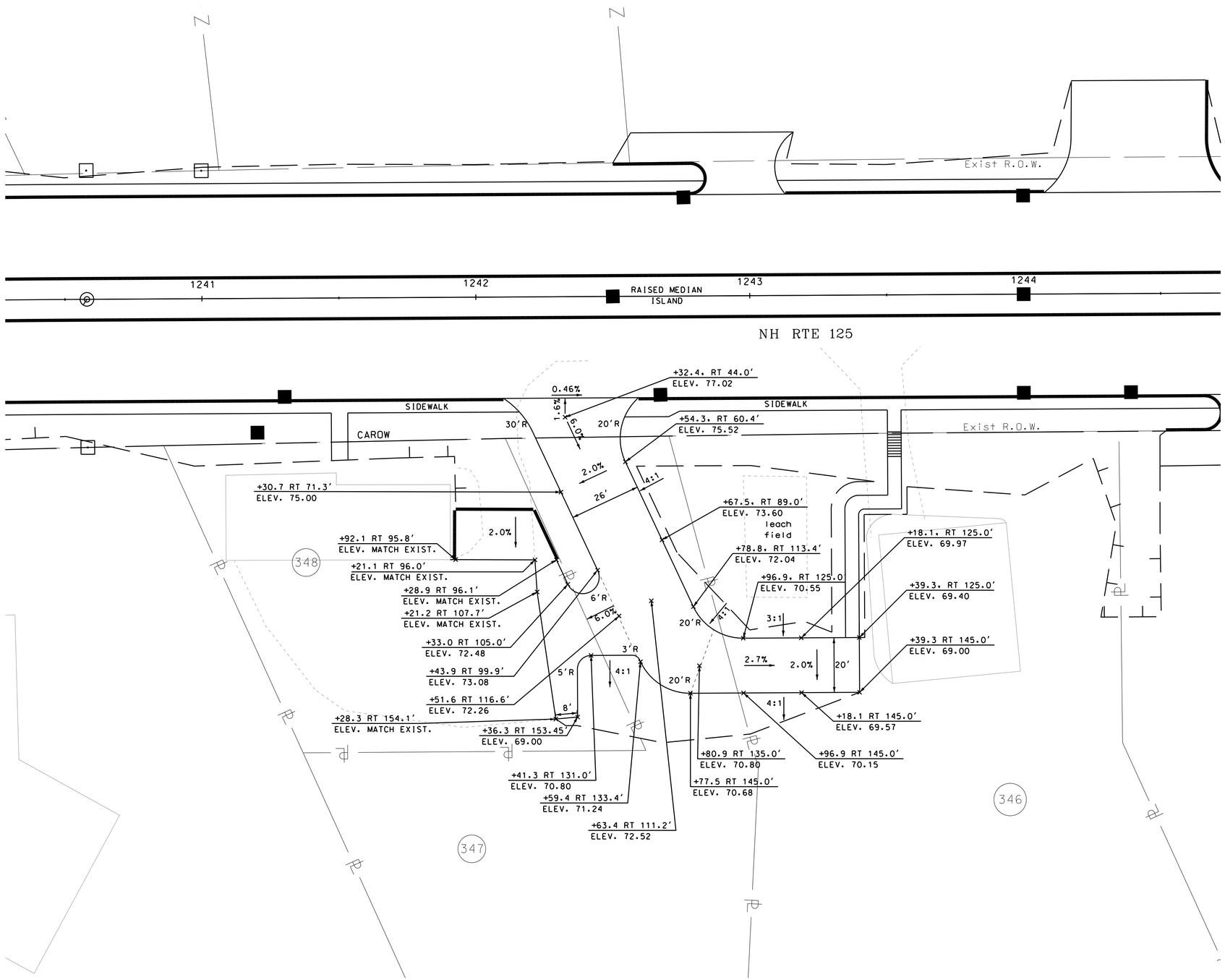
VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SIDEWALK CURB RAMPS WITH DETECTABLE WARNINGS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GDT2	10044G	35	179



GENERAL NOTES

1. SEE CURBING AND PAVEMENT LAYOUT PLANS FOR PAVEMENT AND CURBING INFORMATION.
2. SEE ALIGNMENT LAYOUT PLAN FOR ALIGNMENT INFORMATION.

NUMBER	DATE	STATION	STATION	DESCRIPTION

REVISIONS AFTER PROPOSAL

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

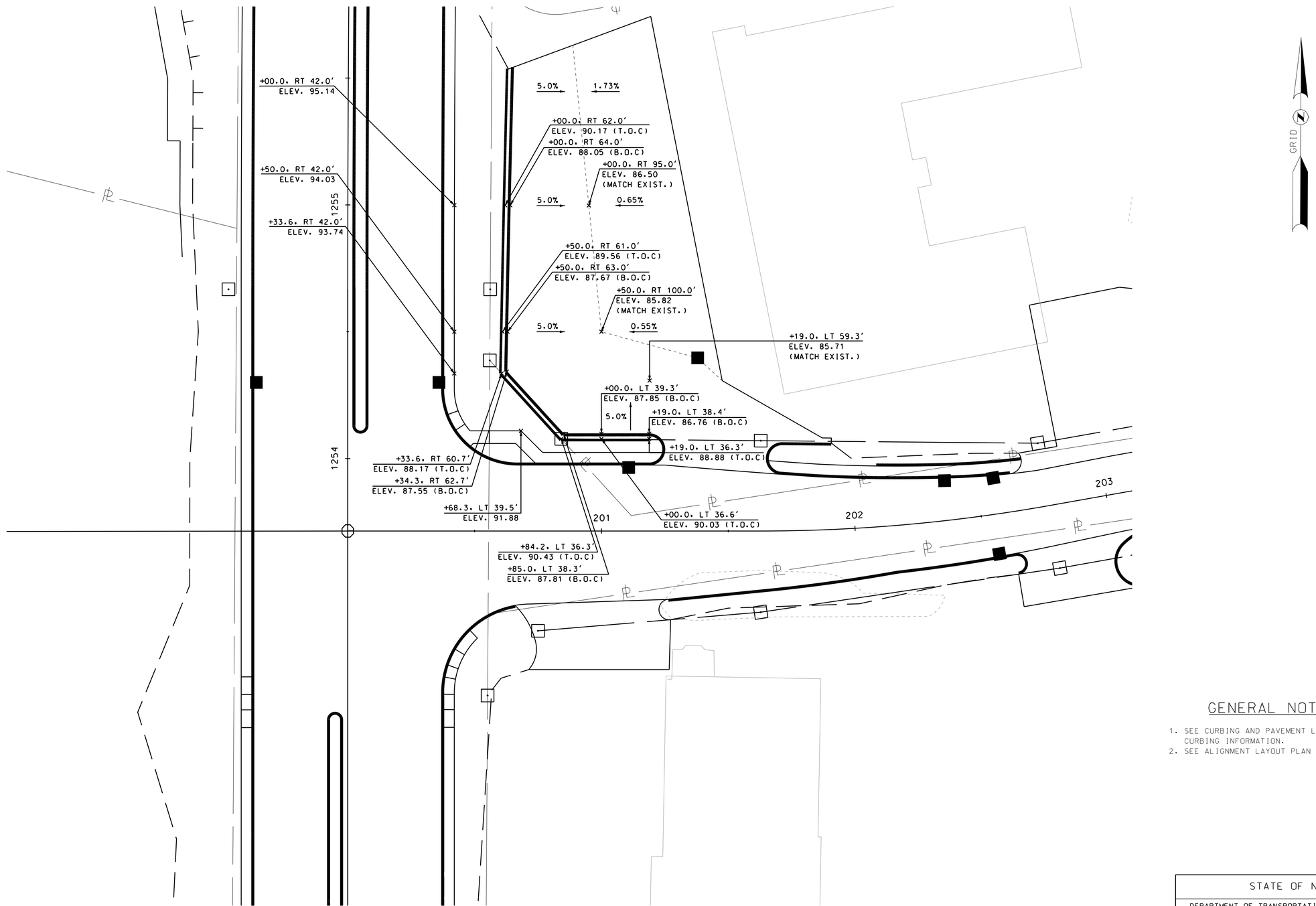
Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

PARCELS 346, 347 & 348 DRIVEWAY GRADING PLAN

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044Ggrading	10044G	36	179



GENERAL NOTES

1. SEE CURBING AND PAVEMENT LAYOUT PLANS FOR PAVEMENT AND CURBING INFORMATION.
2. SEE ALIGNMENT LAYOUT PLAN FOR ALIGNMENT INFORMATION.

T.O.C = TOP OF CURB
B.O.C = BOTTOM OF CURB

20 0 20 40
SCALE IN FEET

REVISIONS AFTER PROPOSAL				
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
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AS BUILT DETAILS		DATE

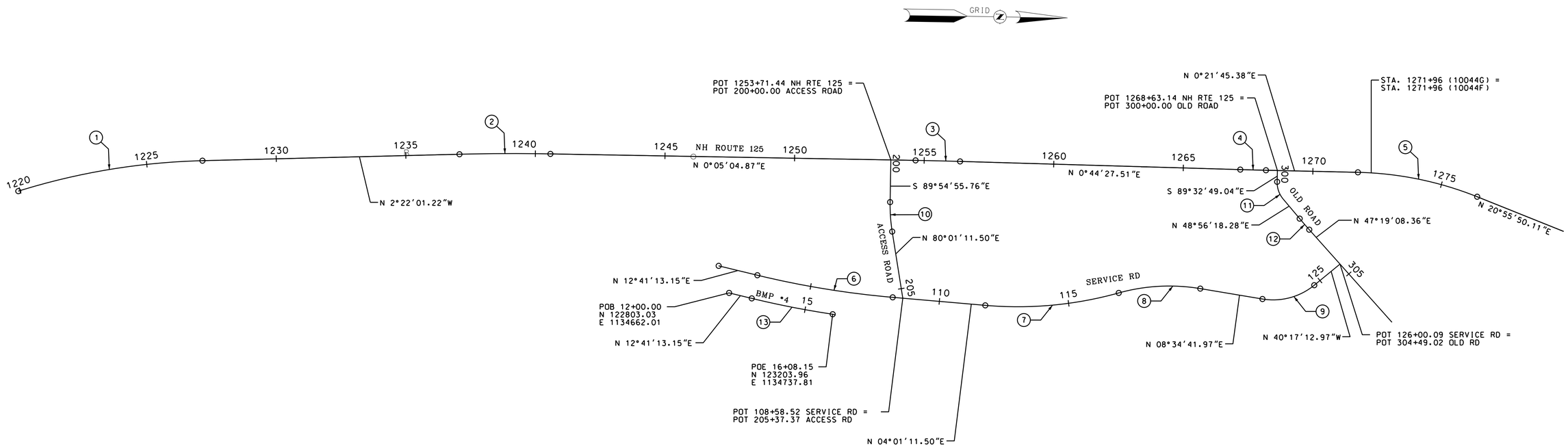
Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

PARCEL 339
BACK CURB GRADING PLAN

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044Ggrading339	10044G	37	179



NH ROUTE 125

CURVE	PI	N	E	Δ	T	R	L	E	PC	PT
1	1223+56.50	120400.32	1134199.75	15°55'08.63" RT	363.53'	2600.00'	722.38'	25.29'	1219+92.97	1227+15.35
2	1238+82.60	121929.79	1134136.53	2°27'06.09" RT	175.47'	8200.00'	350.88'	1.88'	1237+07.14	1240+58.01
3	1255+52.64	123599.88	1134139.00	0°39'22.65" RT	85.91'	15000.00'	171.82'	0.25'	1254+66.73	1256+38.55
4	1267+69.45	124816.59	1134154.74	0°22'42.14" LT	49.53'	15000.00'	99.06'	0.08'	1267+19.92	1268+18.98
5	1274+12.36	125459.49	1134158.81	20°34'04.74" RT	238.60'	1315.00'	472.06'	21.47'	1271+73.76	1276+45.82

SERVICE ROAD

CURVE	PI	N	E	Δ	T	R	L	E	PC	PT
6	105+55.17	123169.80	1134650.26	08°40'01.65" LT	265.23'	3500.00'	529.44'	10.04'	102+89.95	108+19.39
7	114+40.65	124054.10	1134712.40	20°32'16.63" LT	262.70'	1450.00'	519.76'	23.60'	111+77.95	116+97.71
8	118+59.08	124460.67	1134591.83	25°05'47.10" RT	161.37'	725.00'	317.56'	17.74'	116+97.71	120+15.27
9	123+71.96	124972.94	1134669.11	48°51'54.94" LT	113.58'	250.00'	213.21'	24.59'	122+58.39	124+71.60

ACCESS ROAD

CURVE	PI	N	E	Δ	T	R	L	E	PC	PT
10	202+20.03	123418.36	1134358.76	10°03'52.75" LT	57.24'	650.00'	114.18'	2.52'	201+62.79	202+76.97

OLD ROAD

CURVE	PI	N	E	Δ	T	R	L	E	PC	PT
11	300+81.53	124909.64	1134236.85	41°30'52.68" LT	37.90'	100.00'	72.46'	6.94'	300+43.63	301+16.08
12	302+42.71	125017.71	1134360.91	01°37'09.92" LT	28.27'	2000.00'	56.53'	0.20'	302+14.44	302+70.97

BMP #4

CURVE	PI	N	E	Δ	T	R	L	E	PC	PT
13	14+49.15	123046.16	1134716.73	5°04'32.36" LT	159.21'	3592.00'	318.20'	3.53'	12+89.95	16+08.15

NH ROUTE 125 - ALIGNMENT EQUATIONS

CONSTRUCTION BASELINE	CONST. ℄ OFFSET	*LEGACY ALIGNMENT*
1227+49.62	8.76' RT	*L397+50.71*
1237+77.75	0.00' RT	*L407+79.06*
1240+08.85	3.91' LT	*L410+10.12*
1221+70.44	24.78' LT	*L91+65.56*
1223+91.30	22.90' LT	*L93+85.16*
1227+06.57	13.59' LT	*L96+98.49*
1232+84.42	6.85' LT	*L102+76.38*
1246+09.63	0.63' LT	*L116+01.38*
1270+73.86	1.15' LT	*L140+65.58*
1277+06.82	0.00' RT	*L146+96.13*
1277+59.60	0.71' RT	*L147+48.91*

200 0 200 400

SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

ALIGNMENT LAYOUT PLAN

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GALP	10044G	38	179

REVISIONS AFTER PROPOSAL

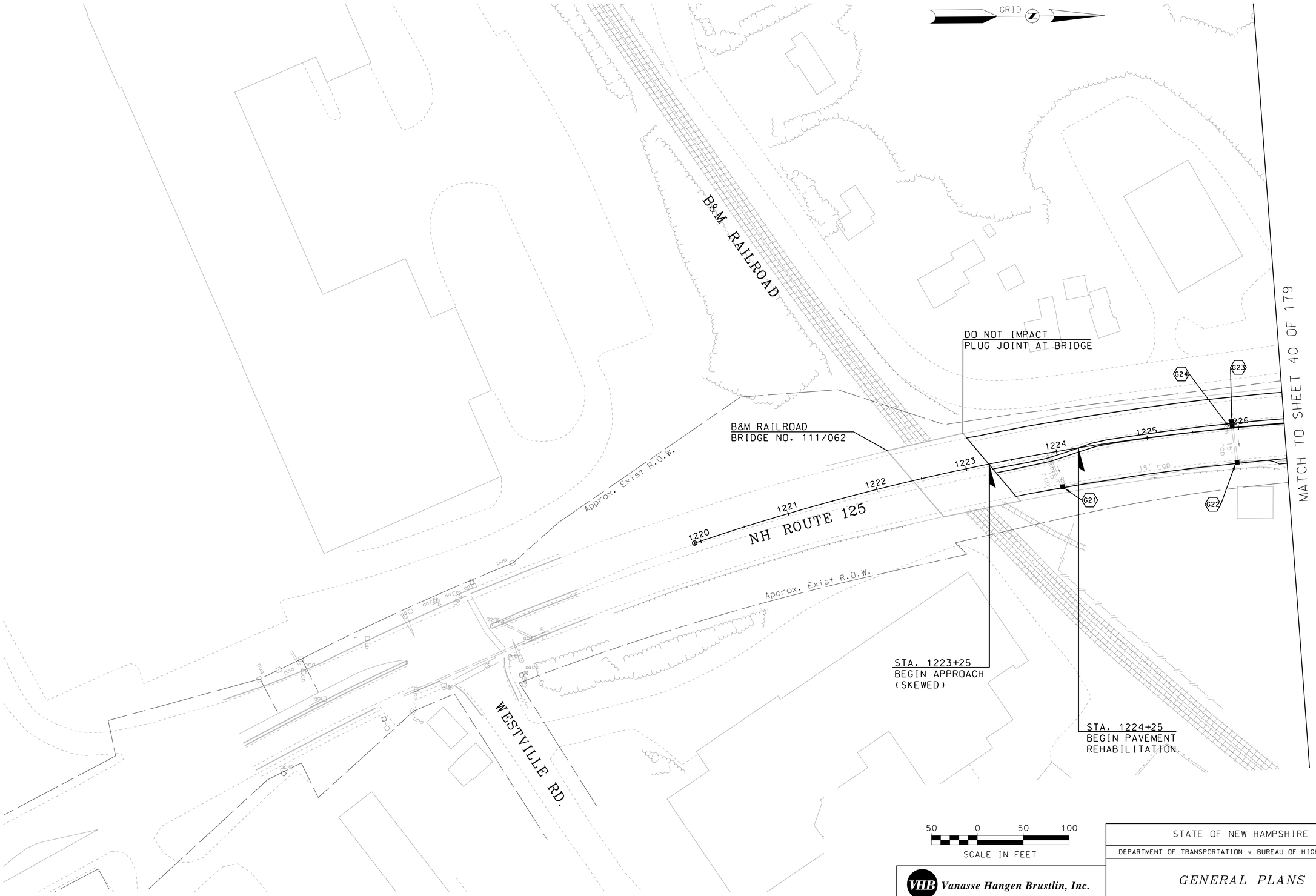
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED VHB TEAM DATE 7/2009

NEW DESIGN F. KOCZALKA DATE 9/2014

SHEET CHECKED A. GRANDE DATE 8/2015

AS BUILT DETAILS DATE



REVISIONS AFTER PROPOSAL			
STATION	STATION	DESCRIPTION	
NUMBER	DATE		

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VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

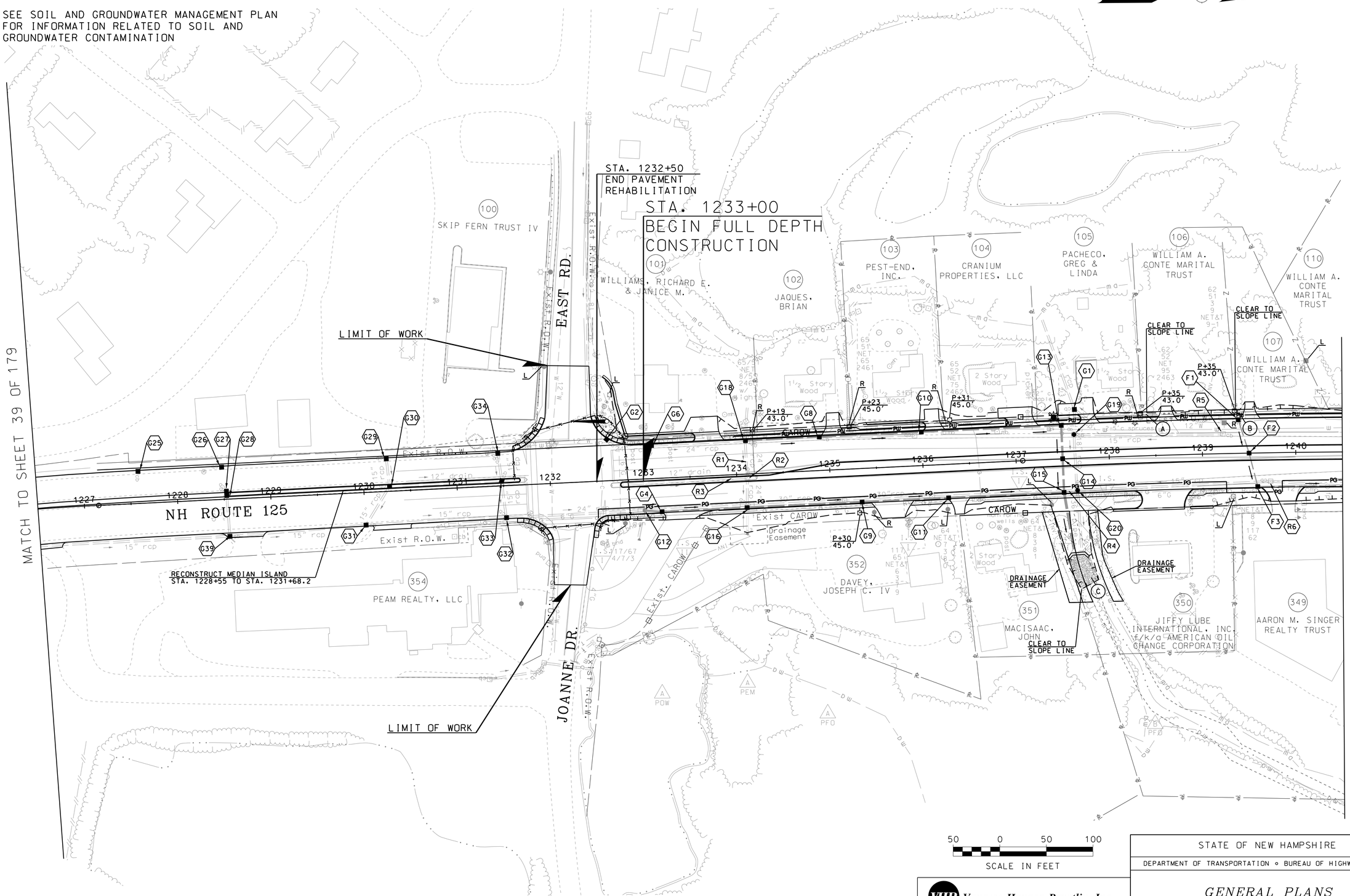
GENERAL PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GG01	10044G	39	179

TREE REMOVAL LEGEND:

☆ ITEMS 201.21 & 201.22 - REMOVING TREES

NOTE: SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION



REVISIONS AFTER PROPOSAL			
STATION	STATION	NUMBER	DATE	DESCRIPTION

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NEW DESIGN	F. KOCZALKA	DATE	9/2014
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VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

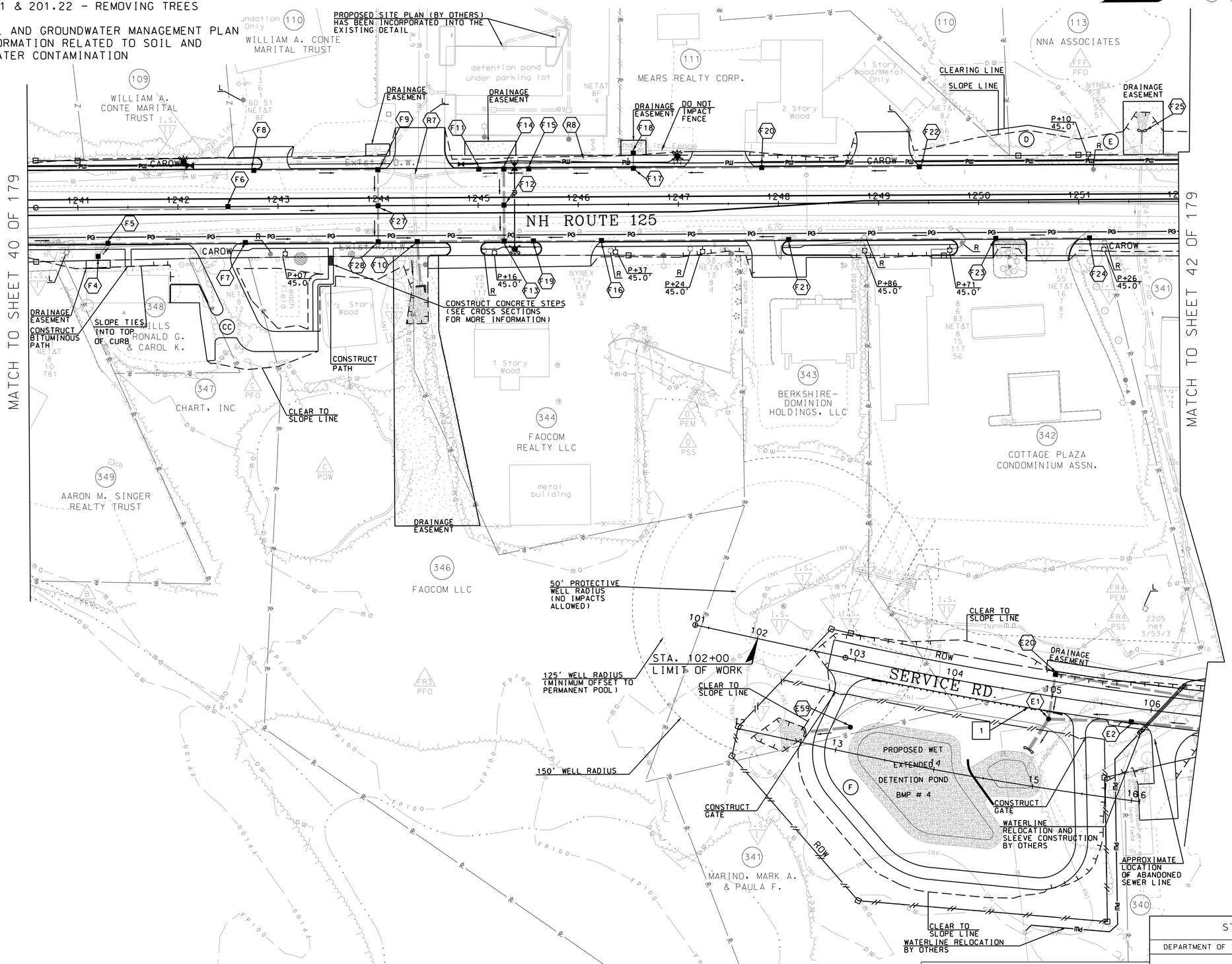
GENERAL PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GG02	10044G	40	179

TREE REMOVAL LEGEND:

☆ ITEMS 201.21 & 201.22 - REMOVING TREES

NOTE: SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION



REVISIONS AFTER PROPOSAL			
DESCRIPTION	STATION	STATION	

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STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

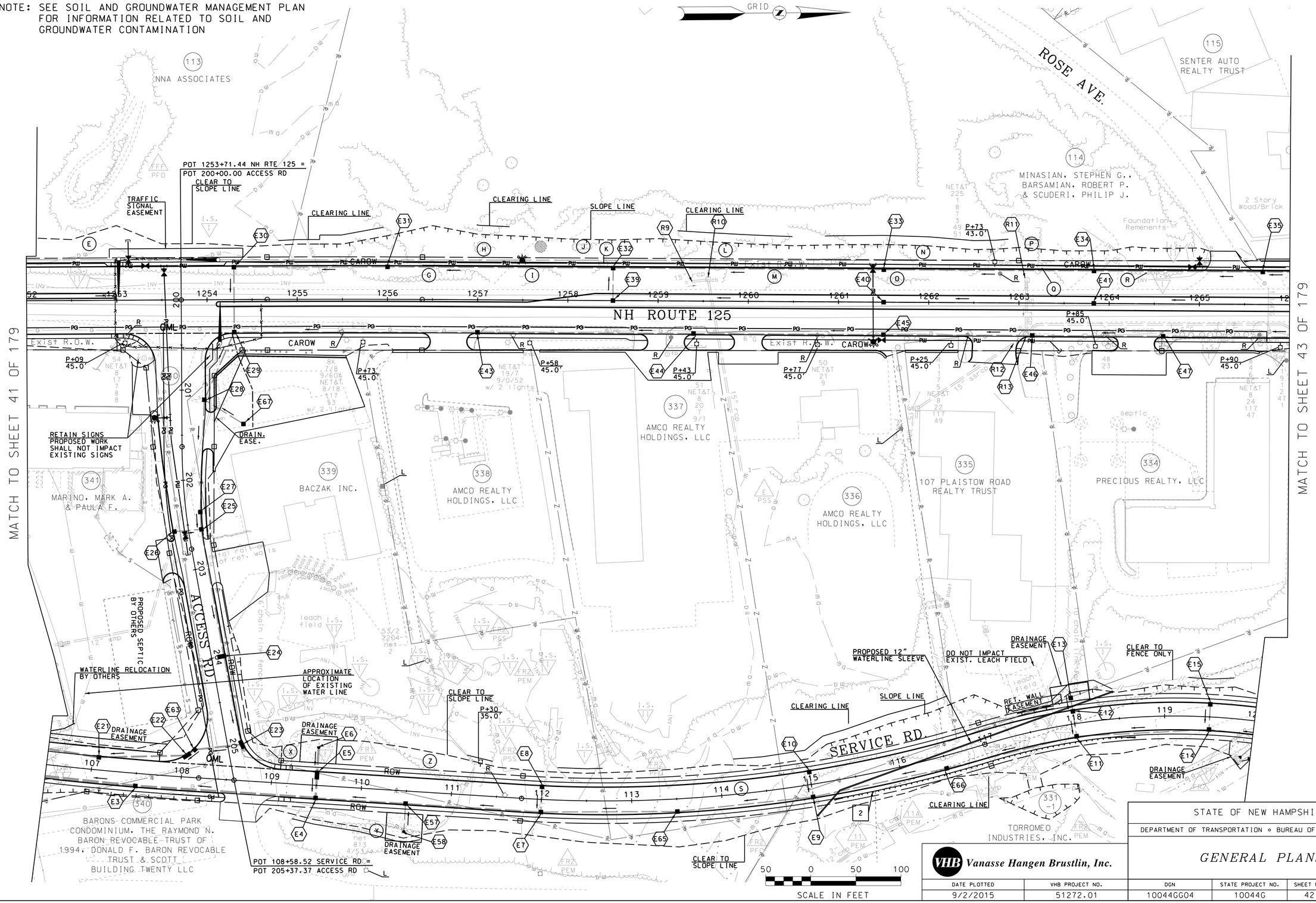
GENERAL PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GG03	10044G	41	179

TREE REMOVAL LEGEND:

☆ ITEMS 201.21 & 201.22 - REMOVING TREES

NOTE: SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION



REVISIONS AFTER PROPOSAL			
STATION	STATION	DATE	NUMBER	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

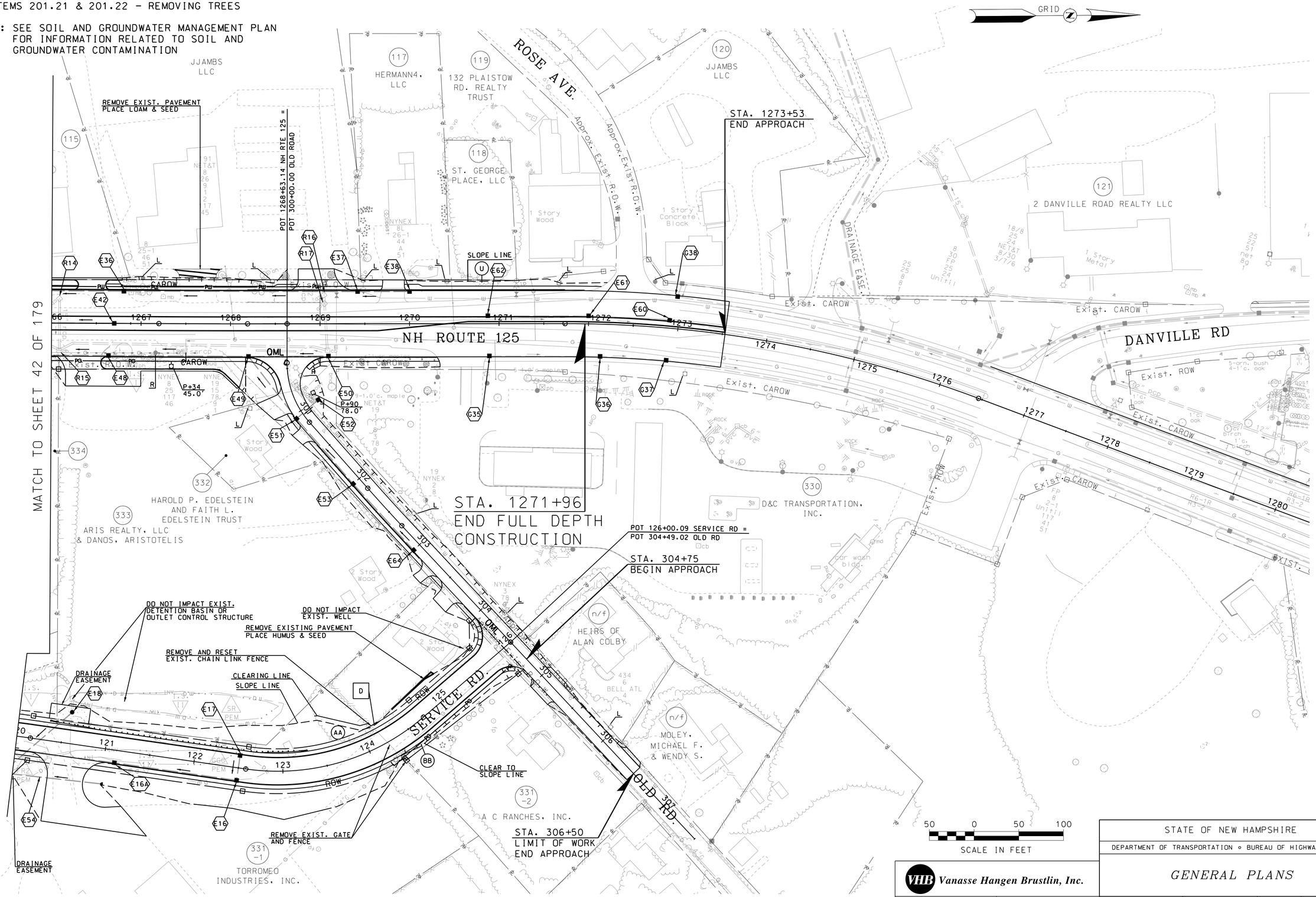
GENERAL PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GG04	10044G	42	179

TREE REMOVAL LEGEND:

☆ ITEMS 201.21 & 201.22 - REMOVING TREES

NOTE: SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION



REVISIONS AFTER PROPOSAL			
DESCRIPTION	STATION	STATION	DATE	NUMBER

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
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VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

GENERAL PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GG05	10044G	43	179

DRAINAGE NOTES - E SERIES

E1 STA. 104+85.7, RT 55.6' TO STA. 105+00.0, RT 23.0'
CONST. 32 LF x 42" PLASTIC PIPE (CORRUGATED INTERIOR)
CONST. DMH (8' DIA.) @ +00.0, RT 23.0'
30" INV. IN = 65.75
36" INV. IN = 65.25
42" INV. OUT = 64.75
RIM ELEV. = 73.23
CONST. PC-5 HEADWALL @ +85.7, RT 55.6'
42" INV. @ HEADWALL = 64.25
CONST. STONE FILL CLASS C (SEE DRAINAGE DETAILS)

E2 STA. 105+00.0, RT 23.0' TO STA. 105+81.8, RT 14.0'
CONST. 76 LF x 36" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (6' DIA.) @ +81.8, RT 14.0'
36" INV. IN = 66.10
36" INV. OUT = 65.85
GRATE ELEV. = 74.15

E3 STA. 105+81.8, RT 14.0' TO STA. 107+50.0, RT 14.0'
CONST. 163 LF x 36" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (6' DIA.) @ +50.0, RT 14.0'
36" INV. IN = 67.35
36" INV. OUT = 67.10
GRATE ELEV. = 75.35

E4 STA. 107+50.0, RT 14.0' TO STA. 109+50.0, RT 14.0'
CONST. 194 LF x 36" RCP
CONST. CB-B (8' DIA.) @ 109+50.0, RT 14.0'
24" INV. IN = 69.75
30" INV. IN = 69.25
36" INV. OUT = 68.75
GRATE ELEV. = 76.44

E5 STA. 109+50.0, RT 14.0' TO STA. 109+50.0, LT 14.0'
CONST. 22 LF x 30" RCP
CONST. CB-B (5' DIA.) w/ DOUBLE GRATE @ +50.0, LT 14.0'
30" INV. IN = 69.80
30" INV. OUT = 69.55
GRATE ELEV. = 76.44

E6 STA. 109+50.0, LT 14.0' TO STA. 109+50.0, LT 40.7'
CONST. 24 LF x 30" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. 30" ALUMINZED STEEL END SECTION @ +50.0, LT 40.7'
INV. @ END SECTION = 70.00

E7 STA. 110+50.0, RT 14.0' TO STA. 112+00.0, RT 14.0'
CONST. 147 LF x 18" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +00.0, RT 14.0'
15" INV. IN (W) = 73.75
15" INV. IN (N) = 73.90
18" INV. OUT = 73.50
GRATE ELEV. = 79.49

E8 STA. 112+00.0, RT 14.0' TO STA. 112+00.0, LT 14.0'
CONST. 24 LF x 15" RCP
CONST. CB-B @ +00.0, LT 14.0'
15" INV. OUT = 73.90
GRATE ELEV. = 79.49

E9 STA. 113+50.0, RT 14.0' TO STA. 115+00.0, RT 14.0'
CONST. 148 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ 115+00.0, RT 14.0'
15" INV. IN (W) = 81.50
15" INV. IN (N) = 81.50
15" INV. OUT = 81.25
GRATE ELEV. = 87.25

E10 STA. 115+00.0, RT 14.0' TO STA. 115+00.0, LT 14.0'
CONST. 24 LF x 15" RCP
CONST. CB-B @ +00.0, LT 14.0'
15" INV. OUT = 82.10
GRATE ELEV. = 87.25

E11 STA. 116+50.0, RT 14.0' TO STA. 118+00.0, RT 14.0'
CONST. 145 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ 118+00.0, RT 14.0'
15" INV. IN (W) = 91.00
15" INV. IN (N) = 89.72
15" INV. OUT = 89.47
GRATE ELEV. = 96.81

E12 STA. 118+00.0, RT 14.0' TO STA. 118+00.0, LT 14.0'
CONST. 24 LF x 15" RCP
CONST. CB-B @ +00.0, LT 14.0'
15" INV. IN = 91.50
15" INV. OUT = 91.25
GRATE ELEV. = 96.81

E13 STA. 118+00.0, LT 14.0' TO STA. 118+00.0, LT 29.0'
CONST. 11 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-E @ +00.0, LT 29.0'
15" INV. OUT = 91.60
GRATE ELEV. = 96.15

E14 STA. 118+00.0, RT 14.0' TO STA. 119+50.0, RT 14.0'
CONST. 143 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +50.0, RT 14.0'
15" INV. IN (W) = 91.95
15" INV. IN (N) = 90.70
15" INV. OUT = 90.45
GRATE ELEV. = 97.63

E15 STA. 119+50.0, RT 14.0' TO STA. 119+50.0, LT 14.0'
CONST. 24 LF x 15" RCP
CONST. CB-B @ +50.0, LT 14.0'
15" INV. OUT = 92.10
GRATE ELEV. = 97.63

E16 STA. 121+12.0, RT 14.0' TO STA. 122+50.0, RT 14.0'
CONST. 134 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +50.0, RT 14.0'
15" INV. IN = 97.85
15" INV. OUT = 97.60
GRATE ELEV. = 103.55

E16A STA. 119+50.0, RT 14.0' TO STA. 121+12.0, RT 14.0'
CONST. 157 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +12.0, RT 14.0'
15" INV. IN = 93.71
15" INV. OUT = 91.50
GRATE ELEV. = 98.84

E17 STA. 122+50.0, RT 14.0' TO STA. 122+50.0, LT 14.0'
CONST. 24 LF x 15" RCP
CONST. CB-B @ +50.0, LT 14.0'
15" INV. OUT = 98.43
GRATE ELEV. = 103.55

E18 STA. 119+89.3, RT 40.8' TO STA. 120+57.5, LT 35.0'
CONST. 102 LF x 15" RCP
CONST 18" ALUMINZED STEEL END SECTION @ +89.3, RT 40.8'
INV. @ END SECTION = 93.20
CONST DMH @ +57.5, LT 35.0'
15" INV. IN = 96.50 (FIELD VERIFY)
15" INV. OUT = 93.73
RIM ELEV. = 97.91
CONST. STONE FILL (SEE DRAINAGE DETAILS)

E19 NOT USED

E20 STA. 105+00.0, RT 23.0' TO STA. 105+00.0, LT 22.0'
CONST. 38 LF x 30" RCP
CONST. CB-E (6' DIA.) @ +00.0, LT 22.0'
30" INV. IN = 66.25
30" INV. OUT = 66.00
GRATE ELEV. = 73.15

E21 STA. 105+00.0, LT 22.0' TO STA. 107+07.0, LT 14.0'
CONST. 201 LF x 30" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +07.0, LT 14.0'
24" INV. IN = 67.95
30" INV. OUT = 67.70
GRATE ELEV. = 75.13

E22 STA. 107+07.0, LT 14.0' TO STA. 205+01.0, RT 45.6'
CONST. 93 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (5' DIA) w/ DOUBLE GRATE @ +01.0, RT 45.6'
24" INV. IN = 68.65
24" INV. OUT = 68.40
GRATE ELEV. = 75.25

E23 STA. 205+00.0, RT 43.2' TO STA. 205+00.0, LT 15.8'
CONST. 49 LF x 24" RCP
CONST. CB-B (5' DIA.) w/ DOUBLE GRATE @ +00.0, LT 15.8'
24" INV. IN = 69.57
24" INV. OUT = 69.32
GRATE ELEV. = 75.64

E24 STA. 205+00.0, LT 15.8' TO STA. 204+00.0, LT 14.0'
CONST. 95 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (5' DIA.) w/ DOUBLE GRATE @ +00.0, LT 14.0'
24" INV. IN = 70.32
24" INV. OUT = 70.07
GRATE ELEV. = 76.20

E25 STA. 204+00.0, LT 14.0' TO STA. 202+56.8, LT 14.3'
CONST. 138 LF x 24" PLASTIC PIPE (CORRUGATED INTERIOR)
CONST. CB-F (5' DIA.) @ +56.8, LT 14.3'
15" INV. IN (S) = 74.77
18" INV. IN (W) = 74.52
24" INV. OUT = 74.27
GRATE ELEV. = 80.38

E26 STA. 202+56.8, LT 14.3' TO STA. 202+55.0, RT 15.7'
CONST. 25 LF x 15" RCP
CONST. CB-F @ +55.0, RT 15.7'
15" INV. OUT = 75.32
GRATE ELEV. = 80.45

E27 STA. 202+56.8, LT 14.3' TO STA. 202+37.2, LT 15.7'
CONST. 15 LF x 18" PLASTIC PIPE (CORRUGATED INTERIOR)
CONST. CB-F @ +37.2, LT 15.7'
18" INV. IN = 75.52
18" INV. OUT = 75.27
GRATE ELEV. = 81.40

E28 STA. 202+37.2, LT 15.7' TO STA. 201+10.8, LT 25.0'
CONST. 121 LF x 18" PLASTIC PIPE (CORRUGATED INTERIOR)
CONST. CB-F (6' DIA.) @ +10.8, LT 25.0'
15" INV. IN = 80.25
18" INV. IN = 82.89
18" INV. OUT = 79.00
GRATE ELEV. = 88.44

E29 STA. 201+10.8, LT 25.0' TO STA. 1254+30.0, RT 36.0'
CONST. 78 LF x 18" PLASTIC PIPE (CORRUGATED INTERIOR)
CONST. CB-B @ +30.0, RT 36.0'
15" INV. IN (N) = 87.60
18" INV. IN (W) = 85.85
18" INV. OUT = 85.60
GRATE ELEV. = 92.85

E30 STA. 1254+30.0, RT 36.0' TO STA. 1254+30.0, LT 36.0'
CONST. 68 LF x 18" RCP
CONST. CB-B @ +30.0, LT 36.0'
15" INV. IN = 86.93
18" INV. OUT = 86.68
GRATE ELEV. = 92.85

E31 STA. 1254+30.0, LT 36.0' TO STA. 1256+00.0, LT 36.0'
CONST. 167 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +00.0, LT 36.0'
15" INV. IN = 91.39
15" INV. OUT = 91.14
GRATE ELEV. = 96.64

E32 STA. 1256+00.0, LT 36.0' TO STA. 1258+50.0, LT 36.0'
CONST. 246 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +50.0, LT 36.0'
15" INV. IN (N) = 96.97
15" INV. IN (E) = 96.97
15" INV. OUT = 96.97
GRATE ELEV. = 102.22

E33 STA. 1258+50.0, LT 36.0' TO STA. 1261+50.0, LT 36.0'
CONST. 296 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ 1261+50.0, LT 36.0'
15" INV. IN = 102.19
15" INV. OUT = 101.94
GRATE ELEV. = 107.44

E34 STA. 1261+50.0, LT 36.0' TO STA. 1263+83.0, LT 36.0'
CONST. 229 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +83.0, LT 36.0'
15" INV. IN = 104.93
15" INV. OUT = 104.68
GRATE ELEV. = 110.18

E35 STA. 1263+83.0, LT 36.0' TO STA. 1265+70.1, LT 36.0'
CONST. 184 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +70.1, LT 36.0'
15" INV. IN = 107.13
15" INV. OUT = 106.88
GRATE ELEV. = 112.38

E36 STA. 1265+70.1, LT 36.0' TO STA. 1266+80.6, LT 36.0'
CONST. 107 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +80.6, LT 36.0'
15" INV. IN = 108.43
15" INV. OUT = 108.18
GRATE ELEV. = 113.68

E37 STA. 1266+80.6, LT 36.0' TO STA. 1269+42.0, LT 36.0'
CONST. 258 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +42.0, LT 36.0'
15" INV. IN = 110.41
15" INV. OUT = 110.41
GRATE ELEV. = 115.67

E38 STA. 1269+42.0, LT 36.0' TO STA. 1270+00.0, LT 36.0'
CONST. 54 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +00.0, LT 36.0'
15" INV. OUT = 110.65
GRATE ELEV. = 115.91

E39 STA. 1258+50.0, LT 36.0' TO STA. 1258+50.0, RT 0.0'
CONST. 32 LF x 15" RCP
CONST. CB-B @ +50.0, RT 0.0'
15" INV. IN = 97.81
15" INV. OUT = 97.81
GRATE ELEV. = 103.06

E40 STA. 1258+50.0, RT 0.0' TO STA. 1261+50.0, RT 0.0'
CONST. 296 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ 1261+50.0, RT 0.0'
15" INV. IN = 103.03
15" INV. OUT = 102.78
GRATE ELEV. = 108.28

E41 STA. 1261+50.0, RT 0.0' TO STA. 1263+83.0, RT 0.0'
CONST. 229 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +83.0, RT 0.0'
15" INV. IN = 105.77
15" INV. OUT = 105.52
GRATE ELEV. = 111.02

E42 STA. 1263+83.0, RT 0.0' TO STA. 1266+70.0, RT 0.0'
CONST. 283 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +70.0, RT 0.0'
15" INV. OUT = 109.15
GRATE ELEV. = 114.40

E43 STA. 1254+30.0, RT 36.0' TO STA. 1257+00.0, RT 36.0'
CONST. 266 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +00.0, RT 36.0'
15" INV. IN = 93.50
15" INV. OUT = 93.50
GRATE ELEV. = 98.87

REVISION AFTER PROPOSAL				
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 3/2015
AS BUILT DETAILS		DATE

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION - BUREAU OF HIGHWAY DESIGN

DRAINAGE NOTES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
3/27/2015	51272.01		10044G	44	179

E44 STA. 1257+00.0, RT 36.0' TO STA. 1259+39.5, RT 36.0'
CONST. 236 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +39.5, RT 36.0'
15" INV. IN = 98.94
15" INV. OUT = 98.94
GRATE ELEV. = 104.19

E45 STA. 1259+39.5, RT 36.0' TO STA. 1261+50.0, RT 36.0'
CONST. 207 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +50.0, RT 36.0'
15" INV. IN = 102.19
15" INV. OUT = 102.19
GRATE ELEV. = 107.44

E46 STA. 1261+50.0, RT 36.0' TO STA. 1263+15.0, RT 36.0'
CONST. 161 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +15.0, RT 36.0'
15" INV. IN = 104.00
15" INV. OUT = 104.00
GRATE ELEV. = 109.38

E47 STA. 1263+15.0, RT 36.0' TO STA. 1264+60.0, RT 36.0'
CONST. 141 LF X 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +60.0, RT 36.0'
15" INV. IN = 105.70
15" INV. OUT = 105.45
GRATE ELEV. = 111.09

E48 STA. 1264+60.0, RT 36.0' TO STA. 1266+63.8, RT 36.0'
CONST. 200 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +63.8, RT 36.0'
15" INV. IN = 107.25
15" INV. OUT = 107.00
GRATE ELEV. = 113.49

E49 STA. 1266+63.8, RT 36.0' TO STA. 1268+20.0, RT 36.4'
CONST. 152 LF X 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (6' DIA.) @ +20.0, RT 36.4'
15" INV. IN (N) = 109.66
15" INV. IN (E) = 108.25
15" INV. OUT = 108.00
GRATE ELEV. = 115.03

E50 STA. 1268+20.0, RT 36.4' TO STA. 1269+09.3, RT 36.0'
CONST. 85 LF x 15" RCP
CONST. CB-B @ +09.3, RT 36.0'
15" INV. OUT = 110.15
GRATE ELEV. = 115.54

E51 STA. 1268+20.0, RT 36.4' TO STA. 301+04.6, RT 9.0'
CONST. 84 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +04.6, RT 9.0'
15" INV. IN (N) = 108.90
15" INV. IN (E) = 109.08
15" INV. OUT = 108.65
GRATE ELEV. = 115.49

E52 STA. 301+04.6, RT 9.0' TO STA. 301+00.0, LT 23.0'
CONST. 29 LF x 15" RCP
CONST. CB-E W/ SLAB TOP @ +00.0, LT 23.0'
15" INV. OUT = 109.85
GRATE ELEV. = 113.29

E53 STA. 301+04.6, RT 9.0' TO STA. 302+00.0, RT 9.0'
CONST. 93 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +00.0, RT 9.0'
15" INV. IN = 109.85
15" INV. OUT = 109.60
GRATE ELEV. = 115.89

E54 STA. 120+00.0, RT 42.8' TO STA. 121+00.0, RT 40.4'
CONST. 100 LF x 15" RCP
CONST. 18" ALUMINZED STEEL END SECTION @ +00.0, RT 42.8'
INV. @ END SECTION = 93.45
CONST. 18" ALUMINZED STEEL END SECTION @ +00.0, RT 40.4'
INV. @ END SECTION = 94.83

E55 NOT USED

E56 NOT USED

E57 STA. 109+50.0, RT 14.0' TO STA. 110+50.0, RT 14.0'
CONST. 94 LF X 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ 110+50.0, RT 14.0'
15" INV. IN (N) = 71.36
18" INV. IN (E) = 71.97
24" INV. OUT = 71.11
GRATE ELEV. = 77.35

E58 STA. 110+50.0, RT 14.0' TO STA. 110+50.0, RT 43.7'
CONST. 28 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. 15" ALUMINZED STEEL END SECTION @ +50.0, RT 43.7'
INV. @ END SECTION = 71.50

E59 STA. 102+66.9, RT 81.0' TO STA. 103+09.2, RT 66.8'
CONST. 43 LF x 36" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. PC-5 HEADWALL @ +66.9, 81.0'
36" INV. @ HEADWALL = 64.29
CONST. OUTLET CONTROL STRUCTURE (5' DIA) @ +09.2, RT 66.8'
CONST. STONE FILL CLASS C (SEE DRAINAGE DETAILS)
SEE BMP PLANS AND DETAILS

E60 STA. 1272+90.0, LT 8.9'
REMOVE EXIST. MH COVER AND FRAME (SALVAGE)
REPLACE WITH CB, TYPE B GRATE AND FRAME
GRATE ELEV. = 118.21

E61 STA. 1272+00.0, LT 9.0'
REMOVE EXIST. MH COVER AND FRAME (SALVAGE)
REPLACE WITH CB, TYPE B GRATE AND FRAME
GRATE ELEV. = 117.80

E62 STA. 1270+87.5, LT 8.9'
REMOVE EXIST. MH COVER AND FRAME (SALVAGE)
REPLACE WITH CB, TYPE B GRATE AND FRAME
GRATE ELEV. = 117.05

E63 STA. 205+01.0, RT 45.6' TO STA. 204+96.3, RT 36.6'
CONST. 7 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +96.3, RT 36.6'
24" INV. IN = 68.95
24" INV. OUT = 68.70
GRATE ELEV. = 75.26

E64 STA. 302+00.0, RT 9.0' TO STA. 303+00.0, RT 9.0'
CONST. 97 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ 303+00.0, RT 9.0'
15" INV. OUT = 110.50
GRATE ELEV. = 116.29

E65 STA. 112+00.0, RT 14.0' TO STA. 113+50.0, RT 14.0'
CONST. 148 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +50.0, RT 14.0'
15" INV. IN = 76.91
15" INV. OUT = 76.66
GRATE ELEV. = 82.04

E66 STA. 115+00.0, RT 14.0' TO STA. 116+50.0, RT 14.0'
CONST. 148 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +50.0, RT 14.0'
15" INV. IN = 85.57
15" INV. OUT = 85.32
GRATE ELEV. = 92.85

E67 STA. 201+10.8, LT 25.0' TO STA. 201+37.9, LT 68.2'
CONST. 47 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +37.9, LT 68.2'
15" INV. OUT = 80.50
GRATE ELEV. = 85.63

DRAINAGE NOTES - F SERIES

F1 STA. 1239+50.0, RT 0.0' TO STA. 1239+39.0, LT 36.0'
CONST. 34 LF x 15" RCP
CONST. CB-B @ +39.0, LT 36.0'
15" INV. OUT = 72.70
GRATE ELEV. = 78.01

F2 STA. 1239+58.6, RT 36.0' TO STA. 1239+50.0, RT 0.0'
CONST. 33 LF x 15" RCP
CONST. CB-B @ +50.0, RT 0.0'
15" INV. IN = 72.54
15" INV. OUT = 72.54
GRATE ELEV. = 78.89

F3 STA. 1241+30.0, RT 36.0' TO STA. 1239+58.6, RT 36.0'
REMOVE 147 LF x 12" CMP (SUBSIDIARY)
REMOVE EXISTING CB @ 1241+20.1, RT 41.5' (SUBSIDIARY)
CONST. 167 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +58.6, RT 36.0'
15" INV. IN = 72.39
15" INV. OUT = 72.39
GRATE ELEV. = 77.92

F4 STA. 1241+30.0, RT 36.0' TO STA. 1241+20.0, RT 49.0'
CONST. 13 LF X 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-E @ +20.0, RT 49.0'
15" INV. OUT = 71.80
GRATE ELEV. = 76.70

F5 STA. 1242+58.8, RT 36.0' TO STA. 1241+30.0, RT 36.0'
CONST. 134 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (6' DIA.) @ +30.0, RT 36.0'
15" INV. IN (S) = 71.70
15" INV. IN (E) = 71.70
15" INV. OUT = 71.70
GRATE ELEV. = 77.15

F6 STA. 1244+00.0, LT 0.0' TO STA. 1242+50.0, RT 0.0'
CONST. 147 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +50.0, RT 0.0'
15" INV. OUT = 72.26
GRATE ELEV. = 77.52

F7 STA. 1244+00.0, RT 36.0' TO STA. 1242+67.2, RT 36.0'
CONST. 129 LF x 18" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +67.2, RT 36.0'
15" INV. IN = 71.18
18" INV. OUT = 70.93
GRATE ELEV. = 76.55

F8 STA. 1244+00.0, LT 36.0' TO STA. 1242+76.0, LT 36.0'
CONST. 120 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +76.0, LT 36.0'
15" INV. OUT = 71.22
GRATE ELEV. = 76.48

F9 STA. 1244+00.8, LT 0.0' TO STA. 1244+00.0, LT 36.0'
CORE EXIST. CB @ +00.0, LT 36.0'
CONST. 32 LF x 24" RCP
15" INV. IN (S) = 70.60
18" INV. IN (W) = 68.12 (FIELD VERIFY)
18" INV. OUT = 68.00 (PLUG)
24" INV. OUT = 68.12
GRATE ELEV. = 75.91

F10 STA. 1244+42.0, RT 80.0' TO STA. 1244+39.0, RT 36.0'
REMOVE 43 LF x 18" RCP (SUBSIDIARY)
CONST. 42 LF x 30" RCP
CONST. PC-1 HEADWALL @ +42.0, RT 80.0'
30" INV. @ HEADWALL = 65.62
CONST. CB-B (6' DIA.) @ +39.0, RT 36.0'
30" INV. IN = 67.19
24" INV. IN = 67.55
30" INV. OUT = 65.80
GRATE ELEV. = 75.73
CONST. STONE FILL CLASS C (SEE DRAINAGE DETAILS)

F11 STA. 1245+25.8, LT 36.0' TO STA. 1245+00.8, LT 36.0'
CONST. 21 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +00.8, LT 36.0'
15" INV. OUT = 68.93
GRATE ELEV. = 75.48

F12 STA. 1245+25.8, RT 36.0' TO STA. 1245+25.8, RT 0.0'
CONST. 32 LF x 24" RCP
CONST. CB-B @ +25.8, RT 0.0'
15" INV. IN = 70.90
24" INV. IN = 67.68
24" INV. OUT = 67.68
GRATE ELEV. = 76.39

F13 STA. 1244+39.0, RT 36.0' TO STA. 1245+25.8, RT 36.0'
CONST. 83 LF x 30" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (6' DIA.) @ +25.8, RT 36.0'
24" INV. IN = 67.54
15" INV. IN = 69.75
30" INV. OUT = 67.54
GRATE ELEV. = 75.46

F14 STA. 1245+25.8, RT 0.0' TO STA. 1245+25.8, LT 36.0'
CONST. 32 LF x 24" RCP
CONST. CB-B (5' DIA.) @ +25.8, LT 36.0'
15" INV. IN (S) = 68.83
24" INV. IN (N) = 69.20
24" INV. OUT = 67.83
GRATE ELEV. = 75.46

F15 STA. 1245+25.8, LT 36.0' TO STA. 1245+50.8, LT 36.0'
CONST. 21 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +50.8, LT 36.0'
24" INV. IN = 69.20
24" INV. OUT = 69.20
GRATE ELEV. = 75.48

F16 STA. 1245+55.0, RT 36.0' TO STA. 1246+23.0, RT 36.0'
CONST. 64 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +23.0, RT 36.0'
15" INV. IN = 70.24
15" INV. OUT = 70.24
GRATE ELEV. = 75.88

F17 STA. 1245+50.8, LT 36.0' TO STA. 1246+55.3, LT 36.0'
CONST. 101 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (5' DIA.) @ +55.3, LT 36.0'
18" INV. IN = 70.21
15" INV. IN = 70.78
24" INV. OUT = 69.71
GRATE ELEV. = 76.21

F18 STA. 1246+55.3, LT 36.0' TO STA. 1246+55.3, LT 51.1'
CONST. 12 LF x 18" PLASTIC PIPE (SMOOTH INTERIOR)
ADJUST CB-B @ +55.3, LT 51.1'
18" INV. OUT = 70.29
GRATE ELEV. = 75.80

F19 STA. 1246+25.8, RT 36.0' TO STA. 1245+55.0, RT 36.0'
CONST. 26 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +55.0, RT 36.0'
15" INV. IN = 69.90
15" INV. OUT = 69.90
GRATE ELEV. = 75.50

NUMBER	DATE	STATION	STATION	DESCRIPTION

REVISION AFTER PROPOSAL

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 3/2015
AS BUILT DETAILS		DATE

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION - BUREAU OF HIGHWAY DESIGN

DRAINAGE NOTES

VHB *Vanasse Hangen Brustlin, Inc.*

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
3/27/2015	51272.01		10044G	45	179

F20 STA. 1246+55.3, LT 36.0' TO STA. 1247+83.5, LT 36.0'
CONST. 125 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +83.5, LT 36.0'
15" INV. IN = 73.02
15" INV. OUT = 72.86
GRATE ELEV. = 78.43

F21 STA. 1246+23.0, RT 36.0' TO STA. 1248+10.0, RT 36.0'
CONST. 183 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +10.0, RT 36.0'
15" INV. IN = 73.68
15" INV. OUT = 73.40
GRATE ELEV. = 79.02

F22 STA. 1247+83.5, LT 36.0' TO STA. 1249+41.0, LT 36.0'
CONST. 153 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +41.0, LT 36.0'
15" INV. OUT = 76.81
GRATE ELEV. = 81.94

F23 STA. 1248+10.0, RT 36.0' TO STA. 1250+17.0, RT 36.0'
CONST. 203 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +17.0, RT 36.0'
15" INV. IN = 78.30
15" INV. OUT = 78.05
GRATE ELEV. = 83.64

F24 STA. 1250+17.0, RT 36.0' TO STA. 1251+10.7, RT 36.0'
CONST. 90 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +10.7, RT 36.0'
15" INV. OUT = 80.39
GRATE ELEV. = 85.73

F25 STA. 1251+63.2, LT 57.5' TO 1251+63.7, LT 69.8'
CONST. 13 LF x 24" RCP
24" INV. IN = 75.90 (FIELD VERIFY)
CONST. PC-7 HEADWALL @ +63.7, LT 69.8'
24" INV. @ HEADWALL = 76.11
CONST. STONE FILL CLASS C (SEE DRAINAGE DETAILS)

F26 NOT USED

F27 STA. 1244+00.0, RT 36.0' TO STA. 1244+00.0, LT 0.0'
CONST. 32 LF x 24" RCP
CONST. CB-B (5' DIA.) @ +00.0, LT 0.0'
15" INV. IN (S) = 70.35
24" INV. IN (W) = 67.95
24" INV. OUT = 67.95
GRATE ELEV. = 76.82

F28 STA. 1244+39.0, RT 36.0' TO STA. 1244+00.0, RT 36.0'
CONST. 36 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B (5' DIA.) @ +00.0, RT 36.0'
18" INV. IN (S) = 70.35
24" INV. IN (W) = 67.75
24" INV. OUT = 67.75
GRATE ELEV. = 75.91

DRAINAGE NOTES - G SERIES

G1 STA. 1237+64.8, LT 52.4'
REPLACE CB-B GRATE
GRATE ELEV. = 77.75

G2 STA. 1232+62.7, LT 44.4'
REPLACE CB-B GRATE
18" INV. IN = 76.51 ± (FIELD VERIFY)
24" INV. OUT = 76.26 ± (FIELD VERIFY)
GRATE ELEV. = 86.89

G3 NOT USED

G4 STA. 1234+09.7, RT 36.0' TO STA. 1233+18.3, RT 36.0'
REMOVE 89 LF x 24" RCP (SUBSIDIARY)
CONST. 88 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +18.3, RT 36.0'
24" INV. IN = 79.56
24" INV. OUT = 79.56
GRATE ELEV. = 85.69

G5 NOT USED

G6 STA. 1233+10.3, LT 35.6'
REPLACE CB-B GRATE
24" INV. IN = 76.09 ± (FIELD VERIFY)
24" INV. OUT = 75.83 ± (FIELD VERIFY)
GRATE ELEV. = 84.83

G7 NOT USED

G8 STA. 1236+00.0, LT 36.0' TO STA. 1234+90.5, LT 36.0'
REMOVE 98 LF X 12" RCP (SUBSIDIARY)
REMOVE EXISTING CB @ 1235+92.6, LT 32.4' (SUBSIDIARY)
CORE EXISTING CB @ +90.5, LT 36.0'
CONST. 106 LF x 15" PLASTIC PIPE (SMOOTH INTERIOR)
REPLACE CB-B GRATE @ +90.5, LT 36.0'
24" INV. IN = 74.91
24" INV. OUT = 74.66
GRATE ELEV. = 81.71

G9 STA. 1236+30.0, RT 36.0' TO STA. 1235+33.0, RT 36.0'
REMOVE 89 LF x 30" RCP (SUBSIDIARY)
REMOVE EXISTING CB @ 1236+08.4, RT 33.6' (SUBSIDIARY)
CONST. 89 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +33.0, RT 36.0'
24" INV. IN = 74.94
24" INV. OUT = 74.94
GRATE ELEV. = 81.09

G10 STA. 1237+50.0, LT 36.0' TO STA. 1236+00.0, LT 36.0'
CONST. 147 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +00.0, LT 36.0'
24" INV. IN = 73.73
24" INV. OUT = 73.48
GRATE ELEV. = 80.14

G11 STA. 1237+50.0, RT 36.0' TO STA. 1236+25.9, RT 36.0'
REMOVE 124 LF x UNKNOWN PIPE SIZE (SUBSIDIARY)
CONST. 120 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +25.9, RT 36.0'
24" INV. IN = 73.66
24" INV. OUT = 73.66
GRATE ELEV. = 79.83

G12 STA. 1233+18.3, RT 36.0' TO STA. 1233+00.0, RT 33.6'
REMOVE 20 LF x 24" RCP (SUBSIDIARY)
CONST. 15 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
ADJUST DMH @ +00.0, RT 33.6'
15" INV. IN = 80.75
24" INV. IN = 80.37
24" INV. OUT = 80.00
COVER ELEV. = 86.39

G13 STA. 1237+50.0, RT 0.0' TO STA. 1237+50.0, LT 36.0'
CONST. 32 LF x 30" RCP
CONST. CB-B (6' DIA.) @ +50.0, LT 36.0'
24" INV. IN = 72.74
30" INV. OUT = 72.19
GRATE ELEV. = 78.87

G14 STA. 1237+50.0, RT 36.0' TO STA. 1237+50.0, RT 0.0'
CONST. 32 LF x 30" RCP
CONST. CB-B @ +50.0, RT 0.0'
30" INV. IN = 72.01
30" INV. OUT = 69.04
GRATE ELEV. = 79.83

G15 STA. 1237+58.5, RT 101.1' TO STA. 1237+50, RT 36.0'
CONST. 64 LF x 36" PLASTIC PIPE (SMOOTH INTERIOR)
REMOVE EXISTING HEADWALL @ 1237+66.5, RT 99.3' (SUBSIDIARY)
CONST. PC-9 HEADWALL @ +62.6, RT 100.9'
36" INV. @ HEADWALL = 68.10
30" INV. @ HEADWALL = 68.10 (FIELD VERIFY)
4" INV. @ HEADWALL = 69.24 (FIELD VERIFY)
CONST. CB-B (6' DIA.) @ +50.0, RT 36.0'
30" INV. IN (W) = 68.86
24" INV. IN (S) = 72.74
15" INV. IN (N) = 73.08
36" INV. OUT = 68.36
GRATE ELEV. = 78.87
CONST. STONE FILL CLASS C (SEE DRAINAGE DETAILS)

G16 STA. 1235+33.0, RT 36.0' TO STA. 1234+09.7, RT 36.0'
REMOVE EXISTING CB @ 1234+10.2, RT 33.6' (SUBSIDIARY)
REMOVE EXISTING CB @ 1235+14.3, RT 33.6' (SUBSIDIARY)
REMOVE 118 LF x 30" RCP (SUBSIDIARY)
CONST. 120 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. CB-B @ +09.7, RT 36.0'
15" INV. IN = 78.07
24" INV. IN = 77.32
24" INV. OUT = 77.32
GRATE ELEV. = 83.45

G17 NOT USED

G18 STA. 1234+90.5, LT 36.0' TO STA. 1234+11.2, LT 35.9'
REMOVE 74 LF x 12" RCP (SUBSIDIARY)
CORE EXISTING CB @ +11.2, LT 35.9 (SUBSIDIARY)
CONST. 76 LF x 24" PLASTIC PIPE (SMOOTH INTERIOR)
REPLACE CB-B GRATE @ +11.1, LT 36.0'
24" INV. IN = 75.83 ± (FIELD VERIFY)
24" INV. OUT = 75.58
GRATE ELEV. = 83.42

G19 STA. 1237+63.1, LT 25.4'
REMOVE EXISTING CB GRATE (SALVAGE)
REPLACE WITH DMH COVER
COVER ELEV. = 78.80

G20 STA. 1237+64.2, RT 34.4'
REMOVE EXISTING CB GRATE (SALVAGE)
REPLACE WITH DMH COVER
COVER ELEV. = 78.68

G21 STA. 1224+00.0, RT 39.0'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 112.49

G22 STA 1225+95.0, RT 37.7'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 104.00

G23 STA. 1225+93.5, LT 7.2'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 105.05

G24 STA. 1225+93.3, LT 1.9'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 105.52

G25 STA. 1227+59.1, LT 34.4'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 97.44

G26 STA. 1228+48.8, LT. 34.6
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 94.08

G27 STA. 1228+57.8, LT 8.7'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 94.20

G28 STA. 1228+52.9, LT 3.9'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 94.94

G29 STA. 1230+25.6, LT 35.0'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 91.71

G30 STA. 1230+27.7, LT 5.3'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 92.86

G31 STA. 1230+00.6, RT 34.9'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 91.99

G32 STA. 1231+51.4, RT 34.3'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 89.80

G33 STA. 1231+48.2, LT 5.4'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 90.99

G34 STA. 1231+45.3, LT 35.0'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 89.87

G35 STA. 1270+89.2, RT 36.0'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 116.27

G36 STA. 1272+14.0, RT 36.0'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 116.47

G37 STA. 1272+90.0, RT 36.0'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 116.71

G38 STA. 1272+96.5, LT 36.0'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 118.94

G39 STA. 1228+54.3. RT 39.9'
RECONSTRUCT/ADJUST CB
GRATE ELEV. = 93.47

TEMPORARY DRAINAGE NOTES

T1 STA. 1245+25.8, LT 36.0' TO STA. 1245+25.8, LT 43.0'
CONST. 4 LF x 12" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. DI-D-B @ +25.8, LT 43.0'
12" INV. OUT = 70.69
GRATE ELEV. = 74.86

T2 STA. 1247+83.5, LT 36.0' TO STA. 1247+83.5, LT 43.0'
CONST. 4 LF x 12" PLASTIC PIPE (SMOOTH INTERIOR)
CONST. DI-D-B @ +83.5, LT 43.0'
12" INV. OUT = 73.66
GRATE ELEV. = 77.83

NUMBER	DATE	STATION	STATION	DESCRIPTION
REVISION AFTER PROPOSAL				

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 3/2015
AS BUILT DETAILS		DATE

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION - BUREAU OF HIGHWAY DESIGN

DRAINAGE NOTES

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
3/27/2015	51272.01		10044G	46	179

REMOVAL NOTES

R1 STA. 1234+11.4, RT 4.0' TO STA. 1234+11.2, LT 35.9'
FILL AND ABANDON 36 LF x 24" RCP

R2 STA. 1234+10.2, RT 33.6' TO STA. 1234+11.4, RT 4.0'
FILL AND ABANDON 26 LF x 24" RCP
FILL AND ABANDON EXISTING CB @ +11.4, RT 4.0'

R3 STA. 1234+11.4, RT 4.0' TO STA. 1232+73.8, RT 4.9'
REMOVE 136 LF x 12" DRAIN

R4 STA. 1237+64.2, RT 34.4' TO STA. 1236+08.4, RT 33.6'
REMOVE 152 LF x UNKNOWN PIPE SIZE (124 SUBSID. TO G11)

R5 STA. 1237+63.1, LT 25.4' TO STA. 1239+22.4, LT 21.3'
REMOVE 156 LF x 15" RCP
REMOVE EXISTING CB @ +22.4, LT 21.3'

R6 STA. 1237+64.2, RT 34.4' TO STA. 1239+72.6, RT 30.6'
REMOVE 15 LF x 15" RCP (3 LF SUBSID. TO F2)
FILL AND ABANDON 189 LF x 15" RCP
REMOVE EXISTING CB @ +72.6, RT 30.6'

R7 STA. 1244+41.2, RT 91.2' TO STA. 1244+34.6, LT 29.1'
REMOVE 60 LF x 18" RCP (SUBSID. TO F10)
FILL AND ABANDON 59 LF x 18" RCP
FILL AND ABANDON EXISTING CB @ +34.6, LT 29.1'

R8 STA. 1244+34.6, LT 29.1' TO STA. 1246+55.3, LT 51.1'
REMOVE 218 LF x 15" RCP (25 LF SUBSID. TO F11, 6 LF SUBSID. TO F14,
7 LF SUBSID. TO F15)
REMOVE EXISTING CB @ +34.6, LT 29.1' (SUBSID. TO F18)

R9 STA. 1259+55.4, LT 24.2' TO STA. 1259+29.7, LT 20.6'
REMOVE 24 LF x 15" RCP

R10 STA. 1259+94.0, RT 190.0' TO STA. 1259+55.4, LT 24.2'
REMOVE 61 LF x 15" RCP (3 LF SUBSID. TO E45, 3 LF SUBSID. TO E40)
FILL AND ABANDON 155 LF x 15" RCP
REMOVE EXISTING CB @ +55.4, LT 24.2'

R11 STA. 1263+07.6, RT 34.4' TO STA. 1263+08.8, LT 25.4'
REMOVE 56 LF x 15" RCP (3 LF SUBSID. TO E41)
REMOVE EXISTING CB @ +08.8, LT 25.4'

R12 STA. 1261+88.2, RT 117.5' TO STA. 1263+07.6, RT 34.4'
REMOVE 30 LF x 15" SSRCP (3 LF SUBSID. TO E46)
FILL AND ABANDON 113 LF x 15" SSRCP
REMOVE EXISTING CB @ +07.6, RT 34.4' (SUBSID. TO E46)

R13 STA. 1263+07.6, RT 34.4' TO STA. 1266+08.4, RT 30.3'
REMOVE 303 LF x 15" SSRCP
REMOVE EXISTING CB @ +08.4, RT 30.3'

R14 STA. 1266+08.4, RT 30.3' TO STA. 1266+08.7, LT 27.2'
REMOVE 54 LF x 15" RCP (3 LF SUBSID. TO E42)
REMOVE EXISTING CB @ +08.7, LT 27.2'

R15 STA. 1266+08.4, RT 30.3' TO STA. 1269+08.3, RT 29.5'
FILL AND ABANDON 301 LF x 15" SSRCP
FILL AND ABANDON EXISTING CB @ +08.3, RT 29.5'

R16 STA. 1269+04.8, LT 22.5' TO STA. 1269+04.3, LT 32.2'
REMOVE 6 LF x 12" RCP
REMOVE EXISTING CB @ +04.3, LT 32.2'

R17 STA. 1269+08.3, RT 29.5' TO STA. 1269+04.8, LT 22.5'
REMOVE 49 LF x 12" RCP
REMOVE EXISTING CB @ +04.8, LT 22.5'

REVISION AFTER PROPOSAL			
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 3/2015
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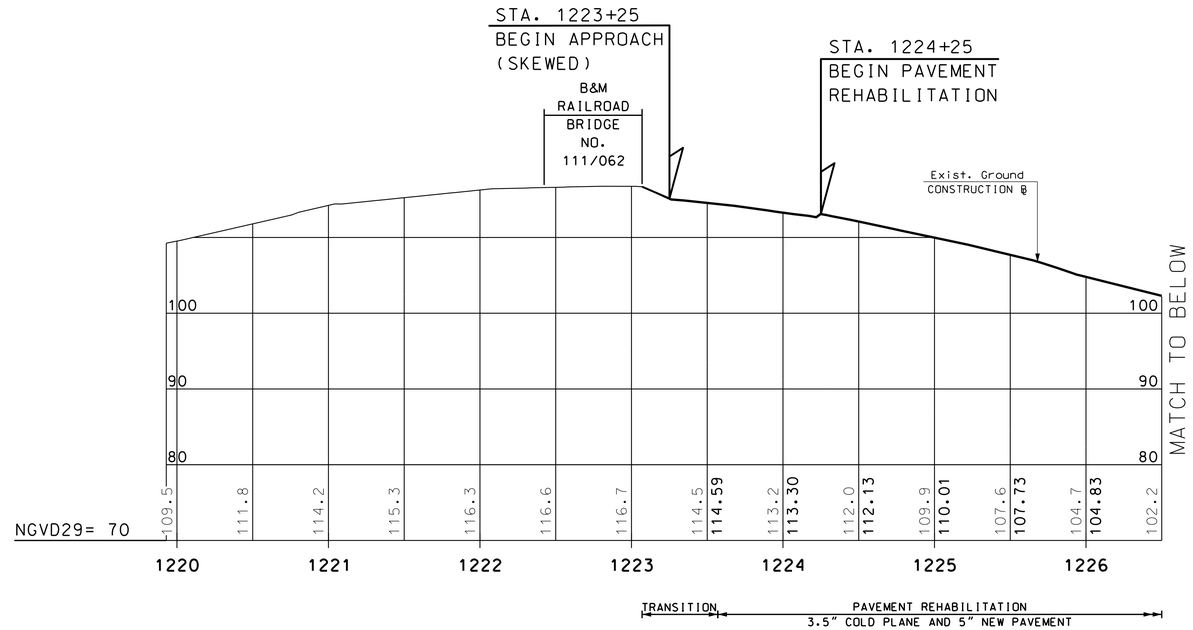
STATE OF NEW HAMPSHIRE

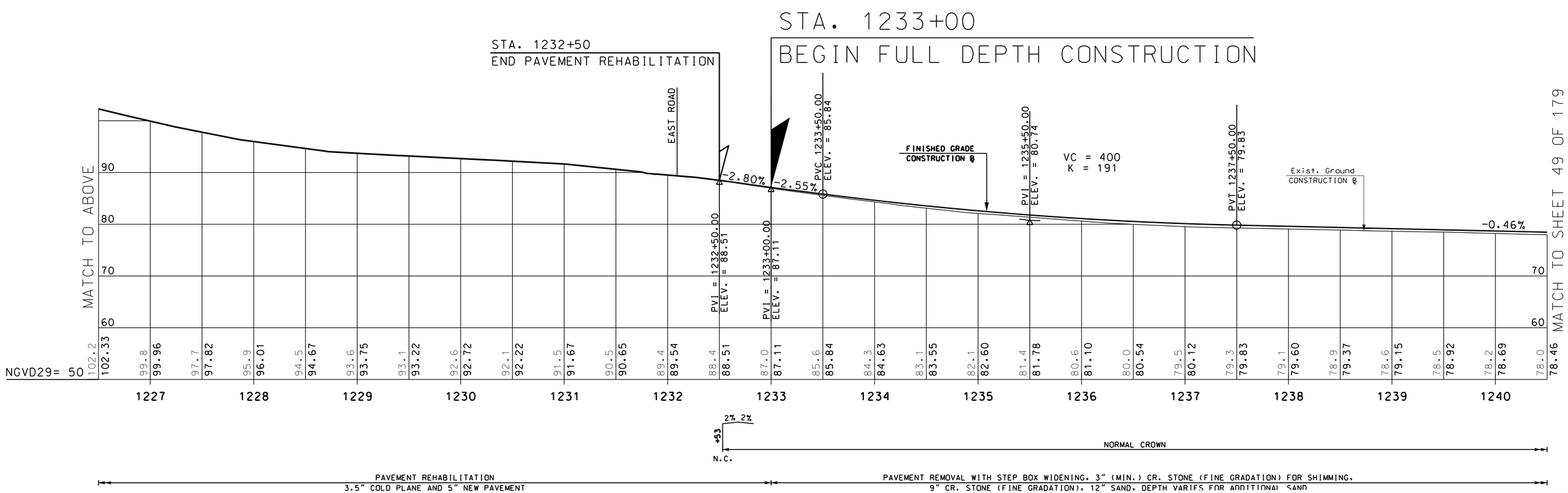
DEPARTMENT OF TRANSPORTATION - BUREAU OF HIGHWAY DESIGN

DRAINAGE NOTES

VHB *Vanasse Hangen Brustlin, Inc.*

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
3/27/2015	51272.01		10044G	47	179





SCALE:
1"= 50' HORIZ.
1"= 10' VERT.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

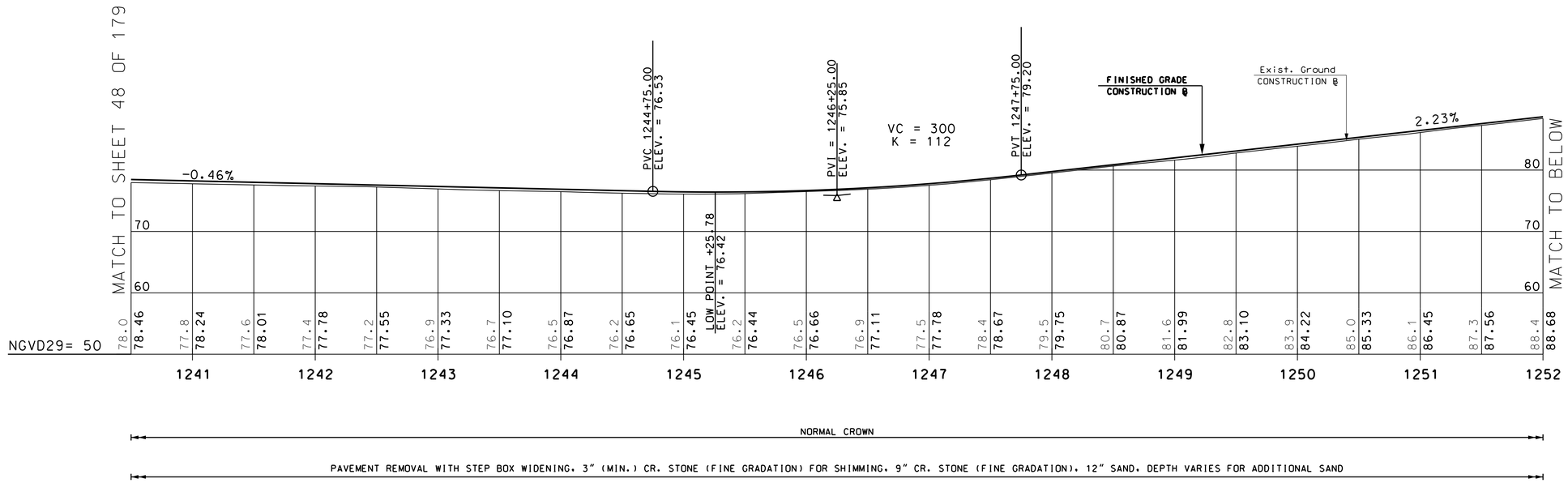
STATE OF NEW HAMPSHIRE

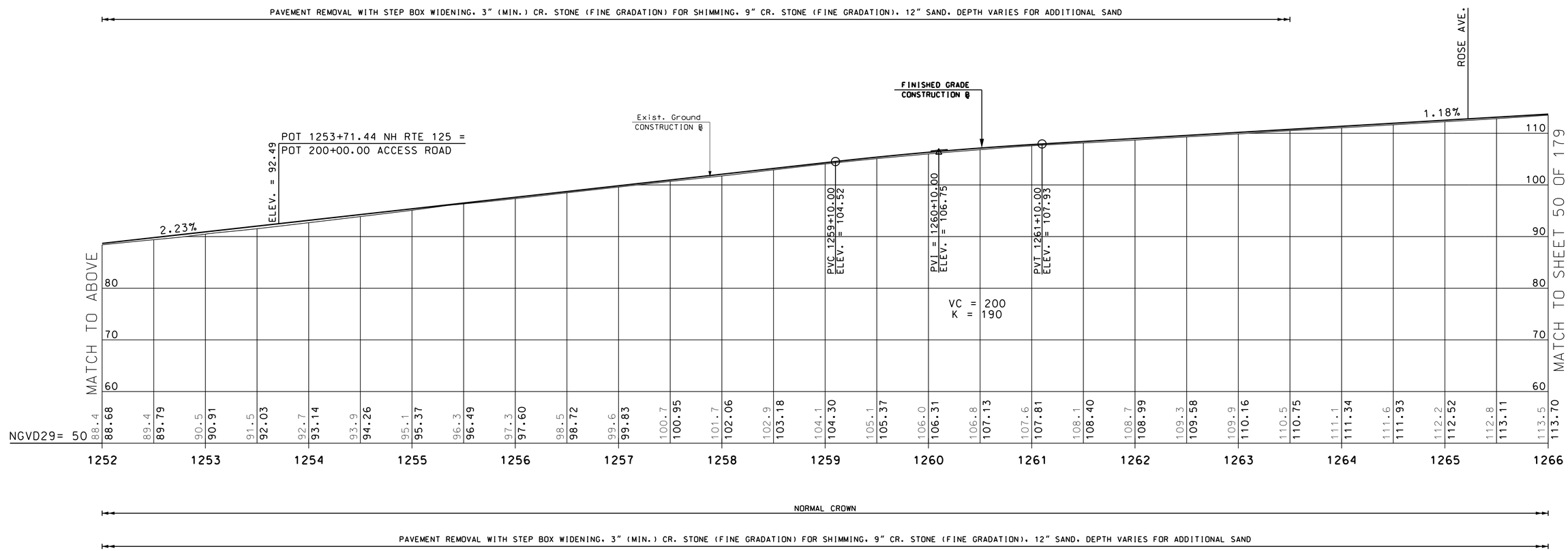
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

Vanasse Hangen Brustlin, Inc.

NH ROUTE 125 PROFILE

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GP01	10044G	48	179





SCALE:
1"= 50' HORIZ.
1"= 10' VERT.

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

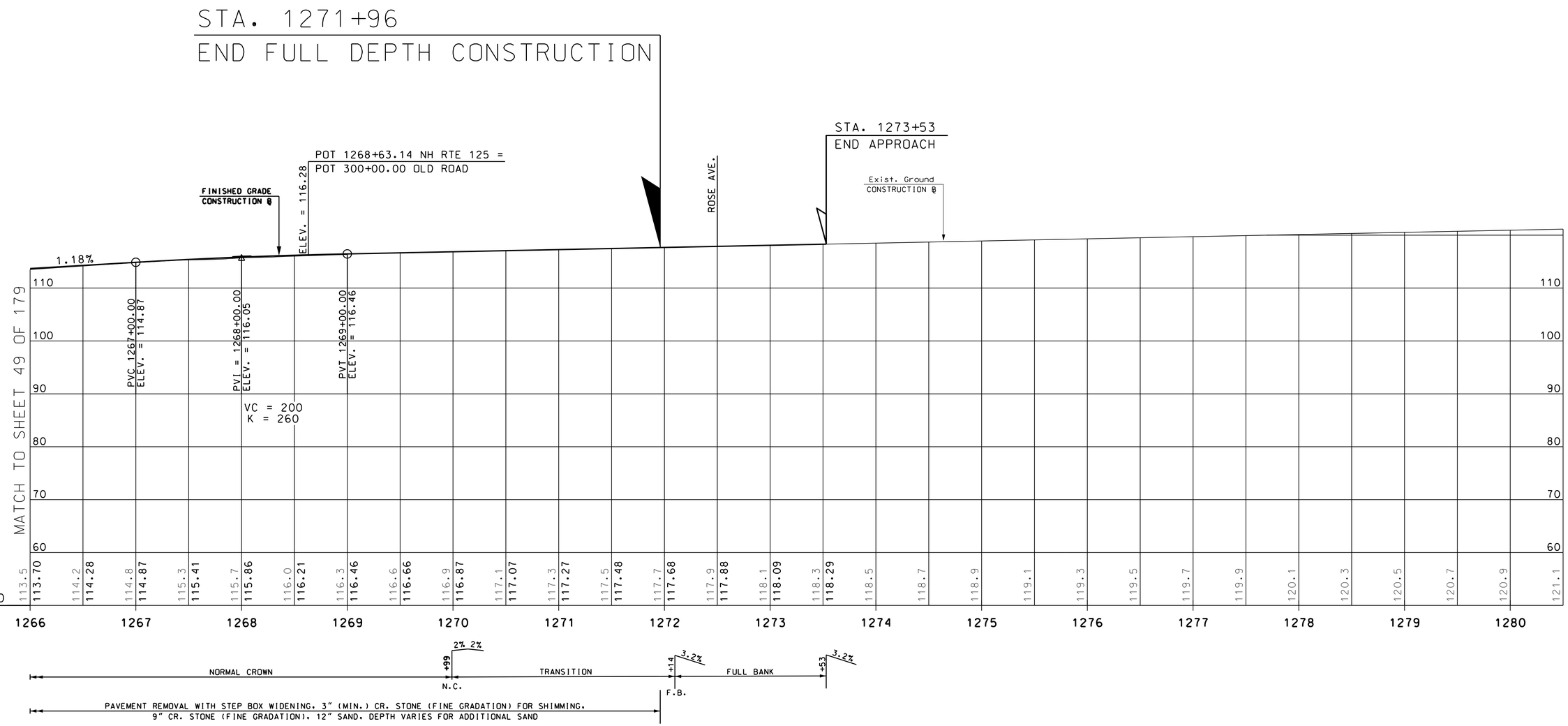
SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

NH ROUTE 125 PROFILE

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GP01	10044G	49	179



SCALE:
1"= 50' HORIZ.
1"= 10' VERT.

NUMBER	DATE	STATION	STATION	DESCRIPTION

REVISIONS AFTER PROPOSAL

SDR PROCESSED VHB TEAM	DATE 7/2009	
NEW DESIGN F. KOCZALKA	DATE 9/2014	
SHEET CHECKED A. GRANDE	DATE 8/2015	
AS BUILT DETAILS	DATE	

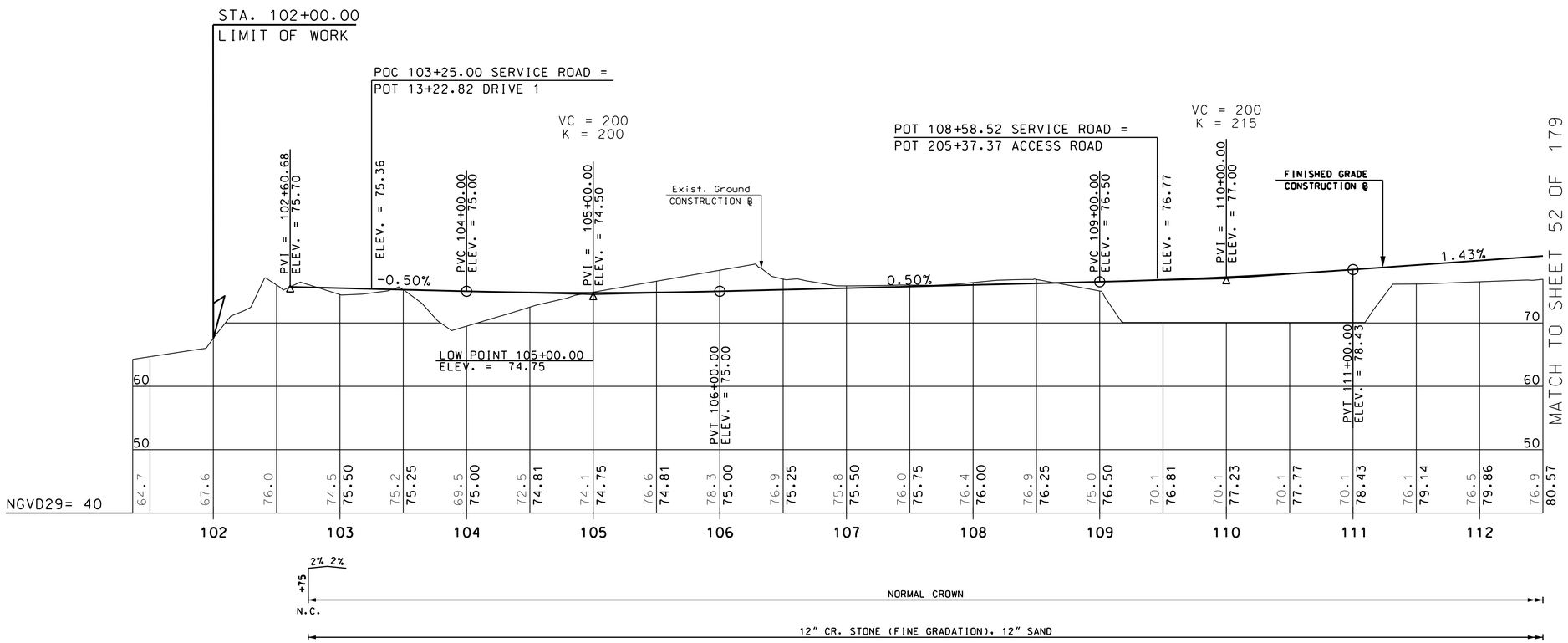
Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

NH ROUTE 125 PROFILE

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GP01	10044G	50	179



SCALE:
1"= 50' HORIZ.
1"= 10' VERT.

NUMBER	DATE	DESCRIPTION	STATION	STATION
		REVISIONS AFTER PROPOSAL		

SDR PROCESSED VHB TEAM DATE 7/2009
NEW DESIGN F. KOCZALKA DATE 9/2014
SHEET CHECKED A. GRANDE DATE 8/2015

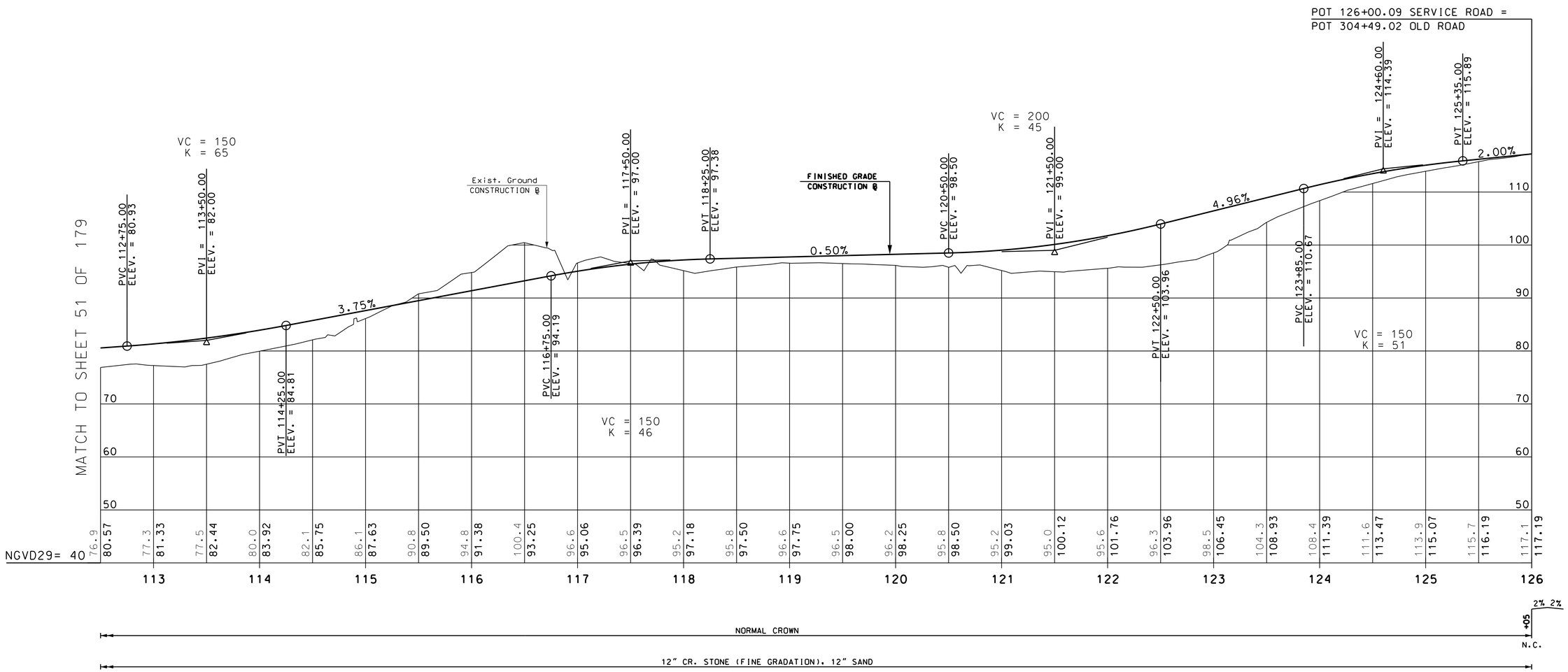
AS BUILT DETAILS DATE

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SERVICE ROAD PROFILE

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GP02	10044G	51	179



SCALE:
1"= 50' HORIZ.
1"= 10' VERT.

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

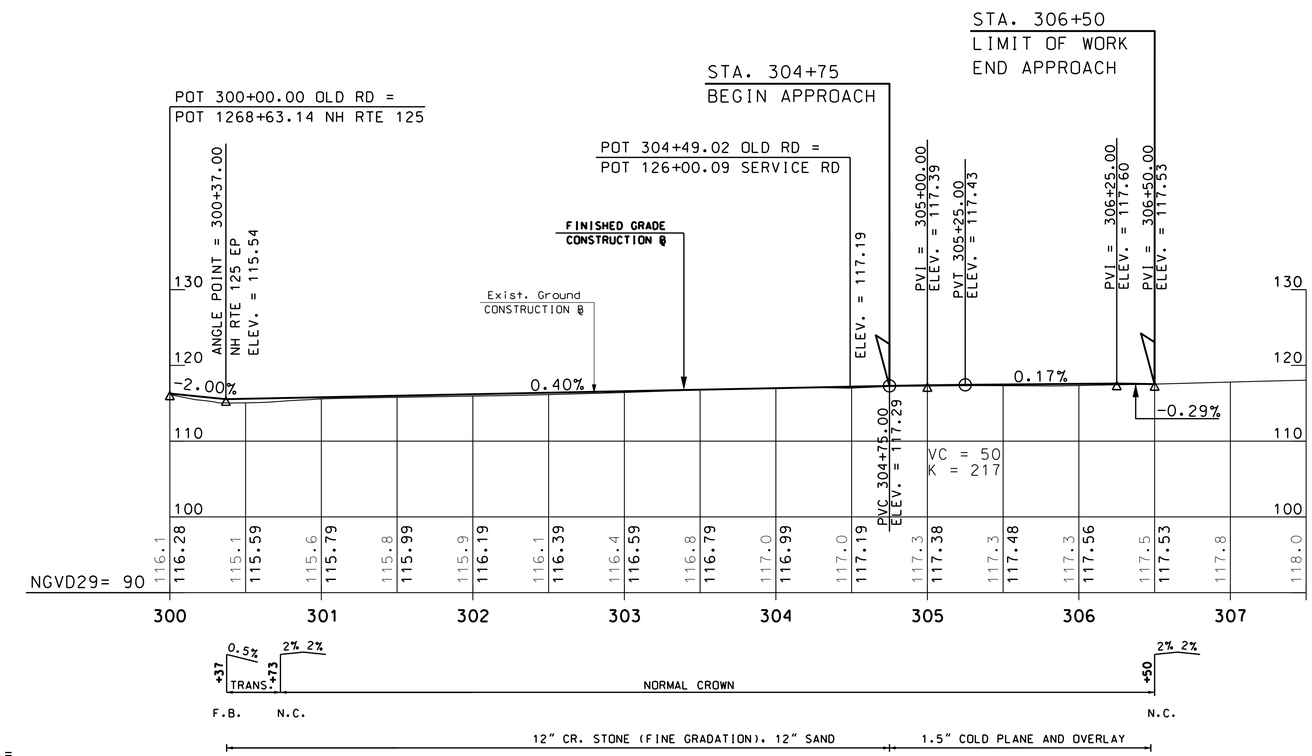
Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

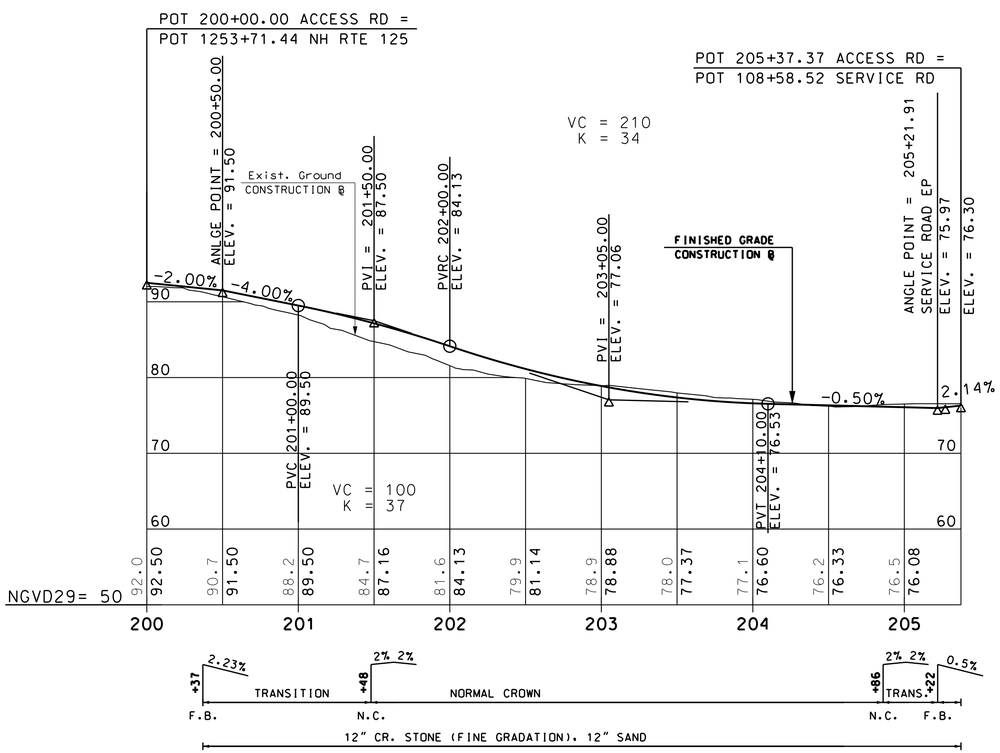
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SERVICE ROAD PROFILE

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GP02	10044G	52	179



OLD ROAD



ACCESS ROAD

SCALE:
1"= 50' HORIZ.
1"= 10' VERT.

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
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Vanasse Hangen Brustlin, Inc.

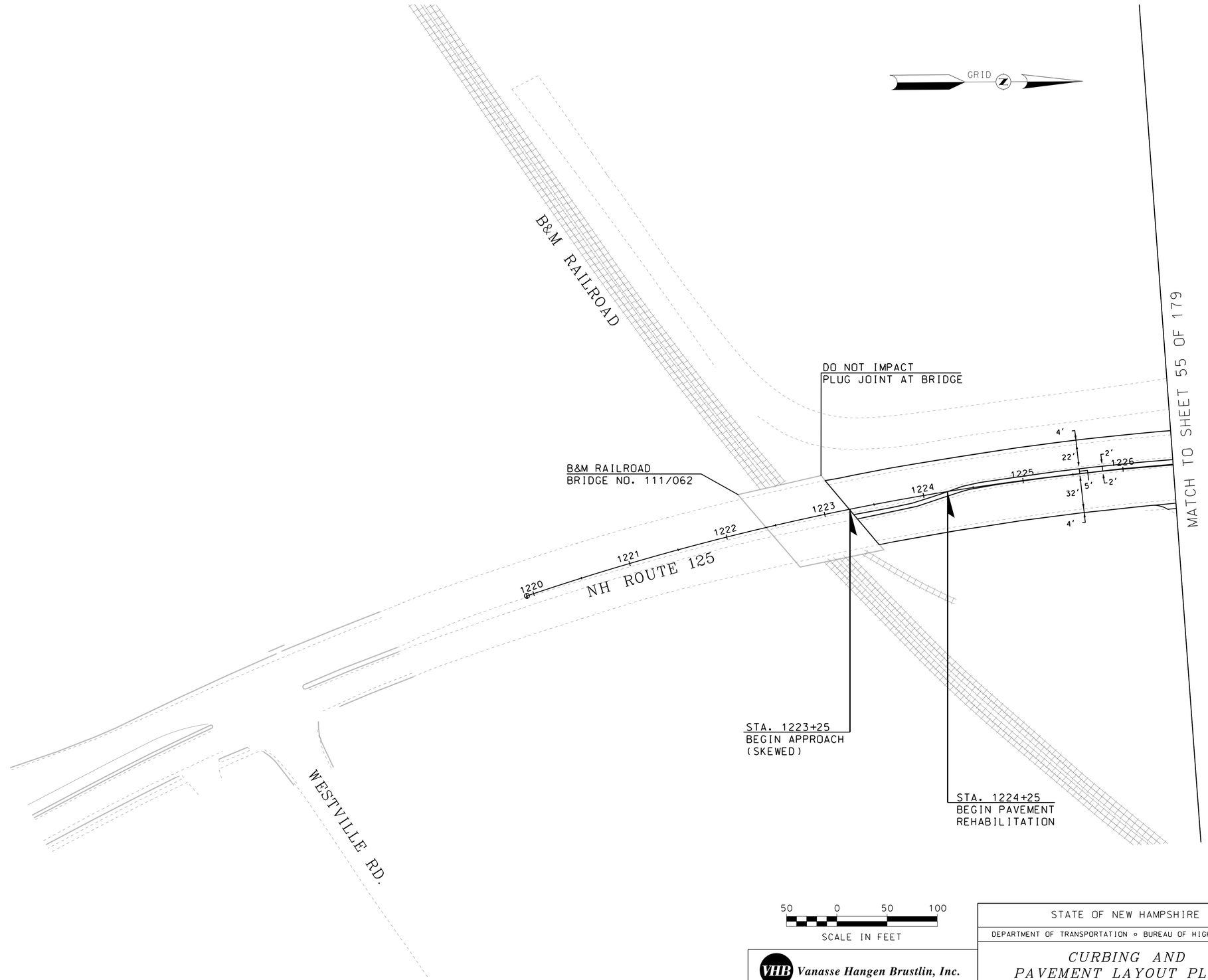
DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

ACCESS ROAD & OLD ROAD PROFILES

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GP03	10044G	53	179



REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

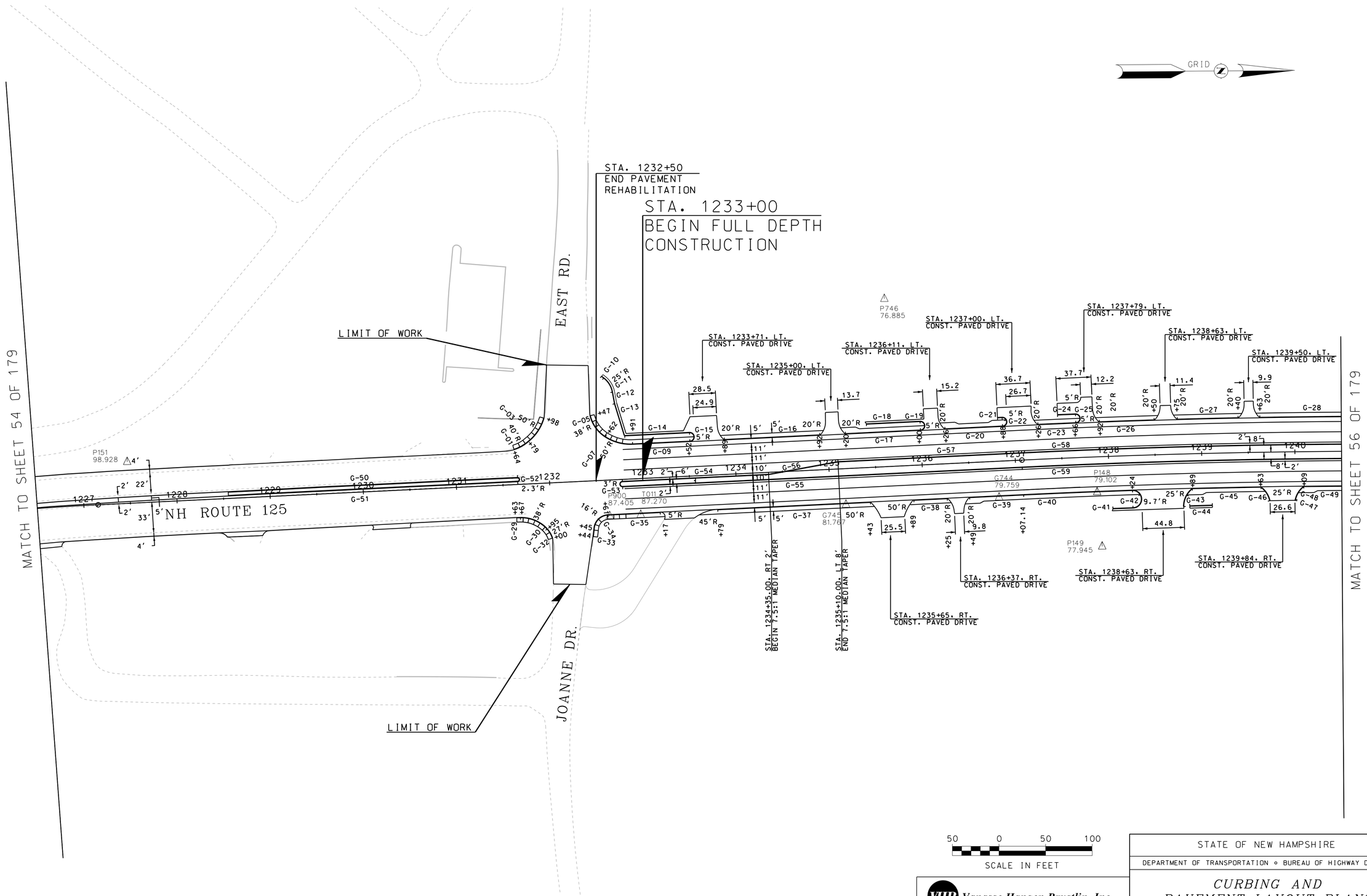
Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

CURBING AND PAVEMENT LAYOUT PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GC01	10044G	54	179



50 0 50 100

SCALE IN FEET

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

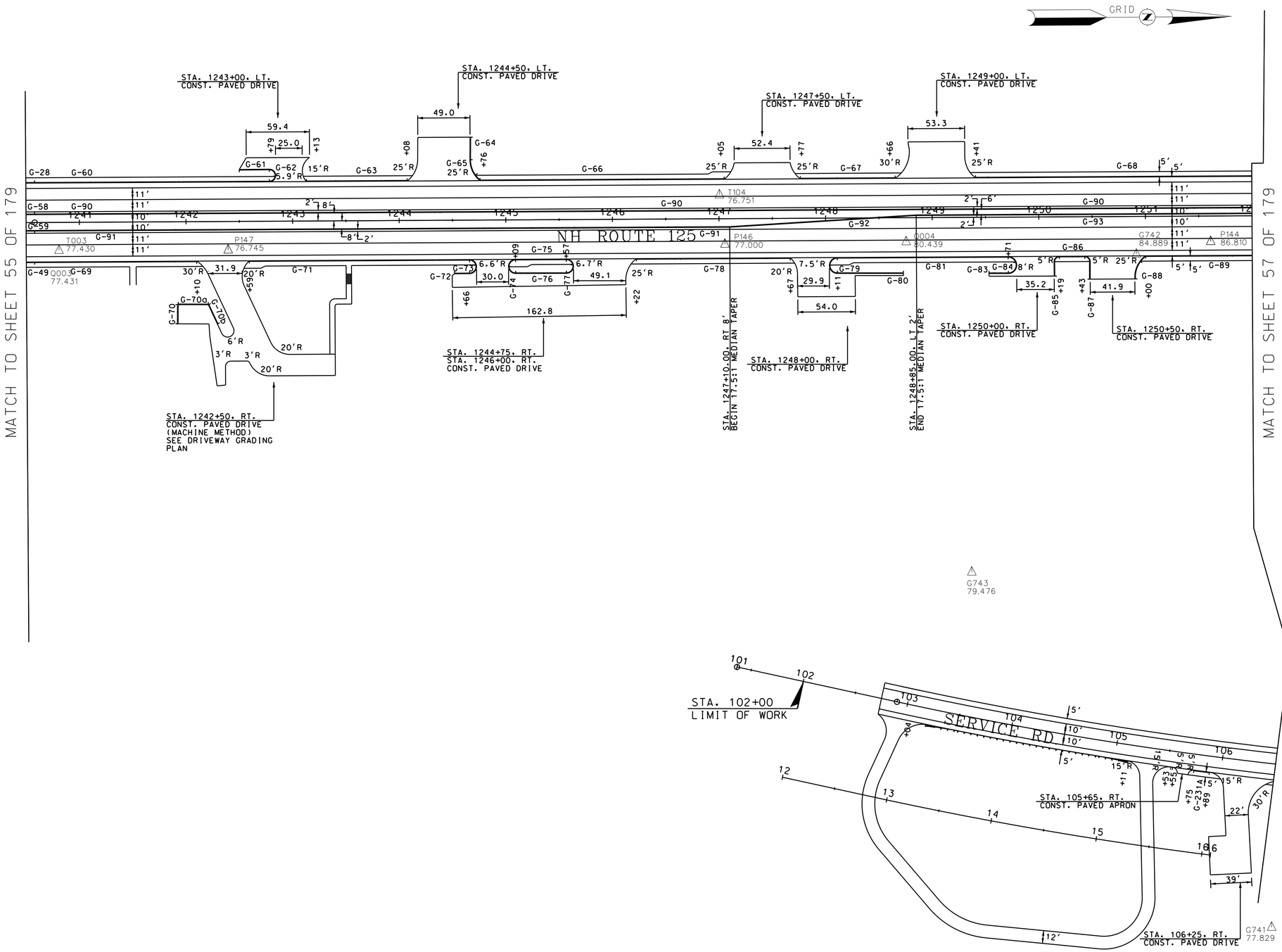
VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

CURBING AND PAVEMENT LAYOUT PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GC02	10044G	55	179



REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009	
NEW DESIGN	F. KOCZALKA	DATE 9/2014	
SHEET CHECKED	A. GRANDE	DATE 8/2015	
AS BUILT DETAILS		DATE	

50 0 50 100
SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

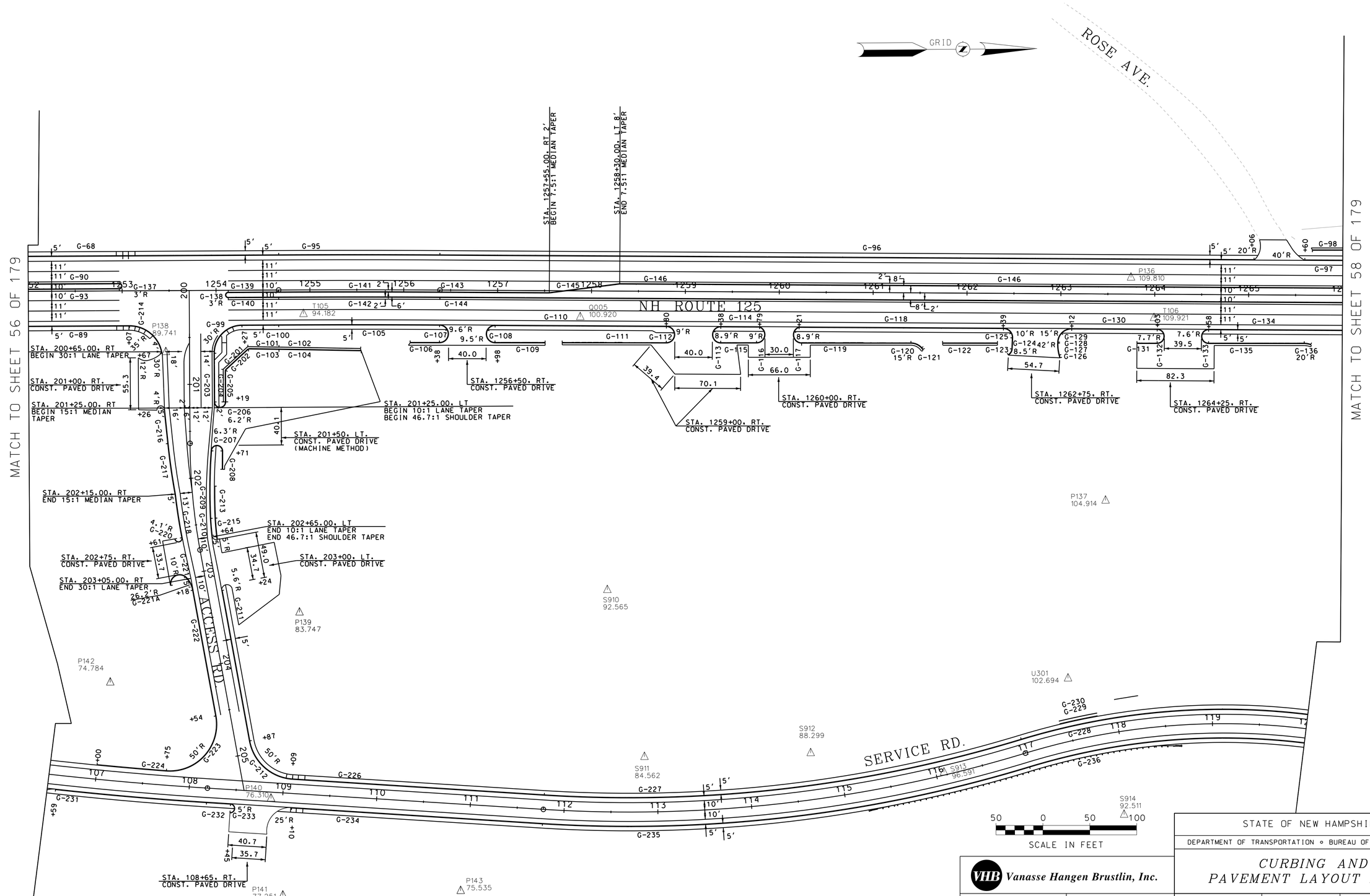
DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

CURBING AND PAVEMENT LAYOUT PLANS

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GC03	10044G	56	179



REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

Vanasse Hangen Brustlin, Inc.

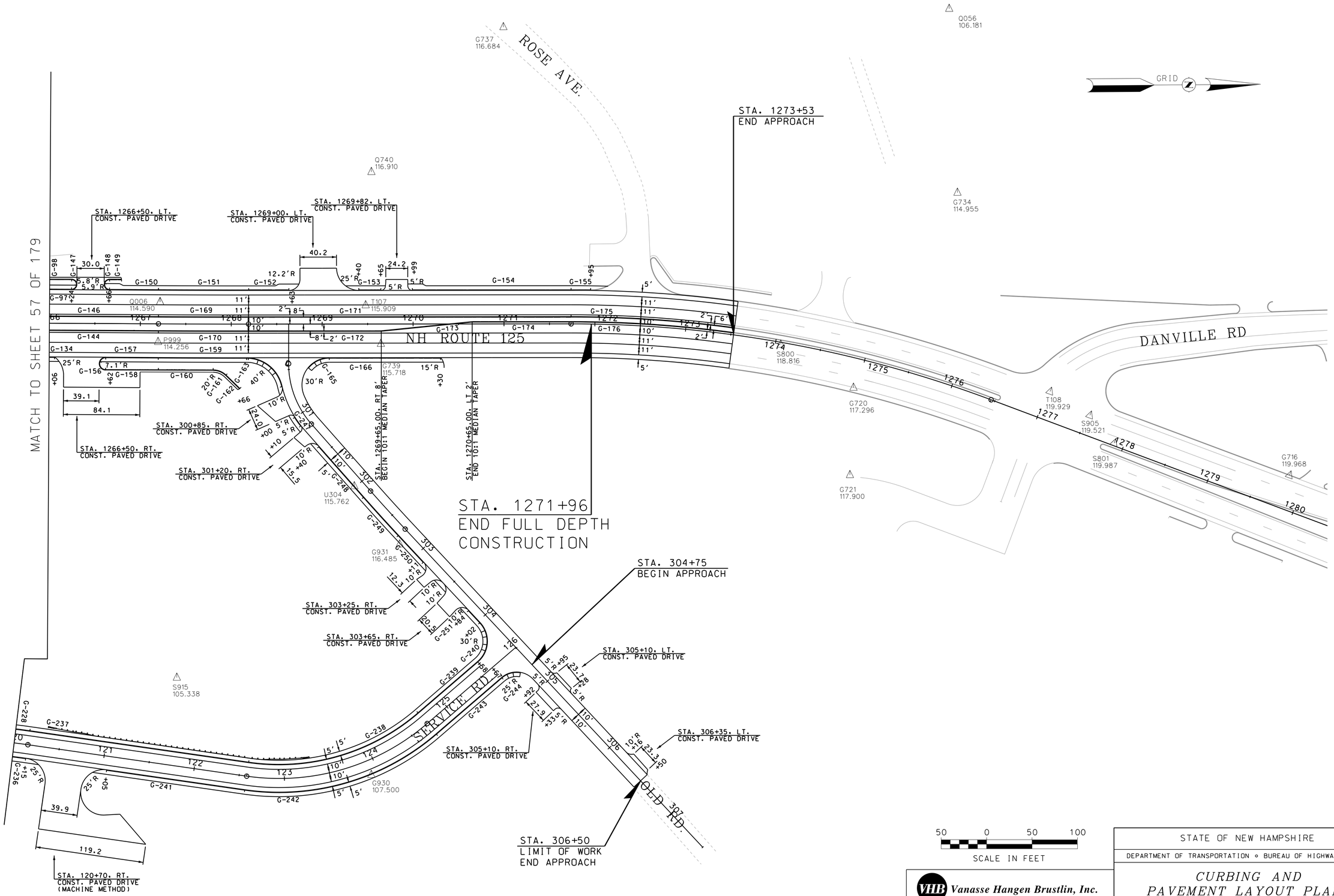
DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

CURBING AND PAVEMENT LAYOUT PLANS

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GC04	10044G	57	179



REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION
		STATION	

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

CURBING AND PAVEMENT LAYOUT PLANS

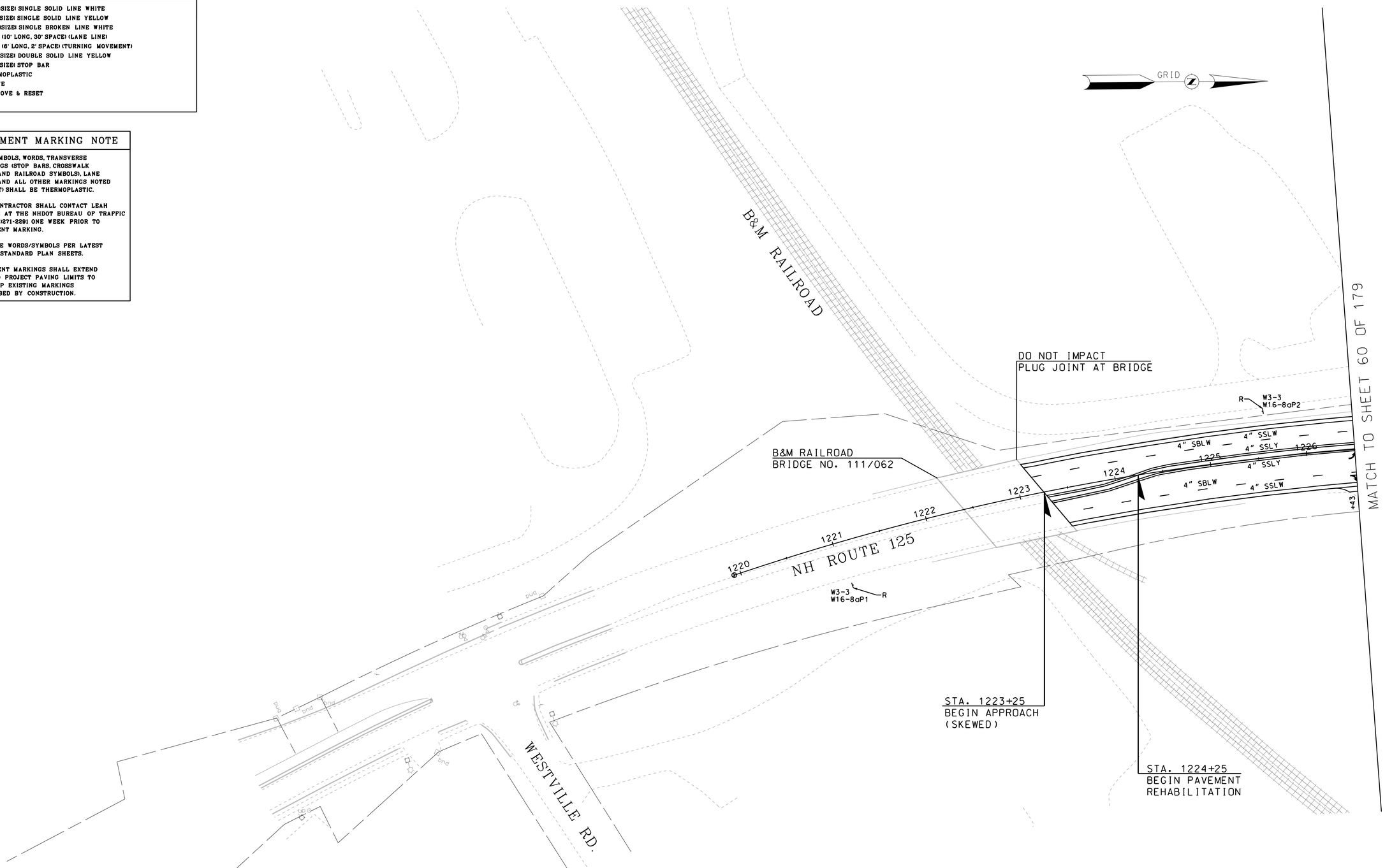
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GC05	10044G	58	179

PAVEMENT MARKING & SIGNING LEGEND

- (SSLW - (SIZE) SINGLE SOLID LINE WHITE
- (SSLY - (SIZE) SINGLE SOLID LINE YELLOW
- (SBLW - (SIZE) SINGLE BROKEN LINE WHITE
  (10' LONG, 30' SPACE) (LANE LINE)
  (6' LONG, 2' SPACE) (TURNING MOVEMENT)
- (DSLY - (SIZE) DOUBLE SOLID LINE YELLOW
- (SB - (SIZE) STOP BAR
- (T) - THERMOPLASTIC
- R - REMOVE
- R&R - REMOVE & RESET
- L - LEAVE

PAVEMENT MARKING NOTE

1. ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS), LANE LINES AND ALL OTHER MARKINGS NOTED WITH (T) SHALL BE THERMOPLASTIC.
2. THE CONTRACTOR SHALL CONTACT LEAH SAVAGE AT THE NHDOT BUREAU OF TRAFFIC AT (603)271-2291 ONE WEEK PRIOR TO PAVEMENT MARKING.
3. REPLACE WORDS/SYMBOLS PER LATEST NHDOT STANDARD PLAN SHEETS.
4. PAVEMENT MARKINGS SHALL EXTEND BEYOND PROJECT PAVING LIMITS TO OVERLAP EXISTING MARKINGS DISTURBED BY CONSTRUCTION.



50 0 50 100
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

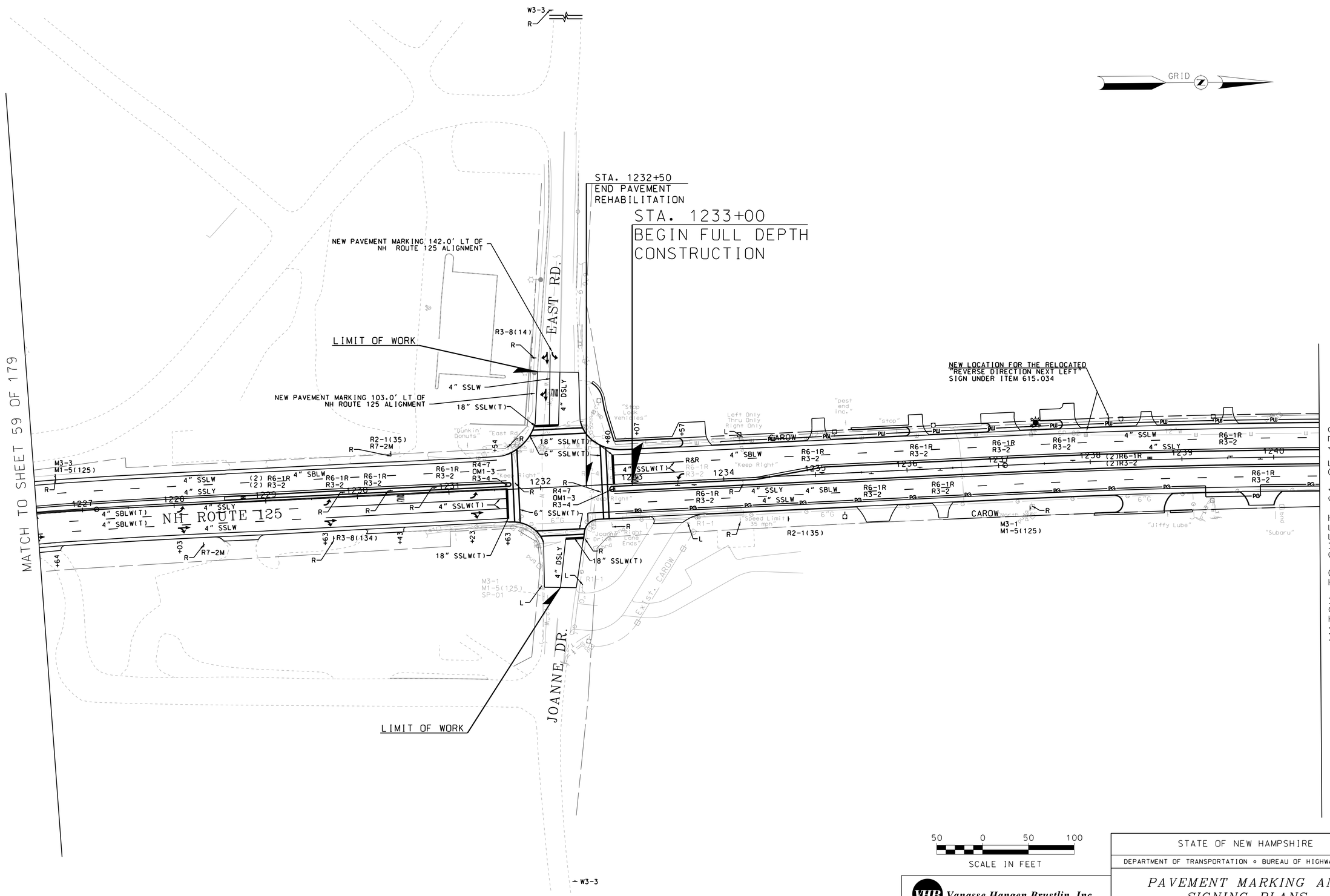
PAVEMENT MARKING AND SIGNING PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GM01	10044G	59	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	



50 0 50 100

SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

PAVEMENT MARKING AND SIGNING PLANS

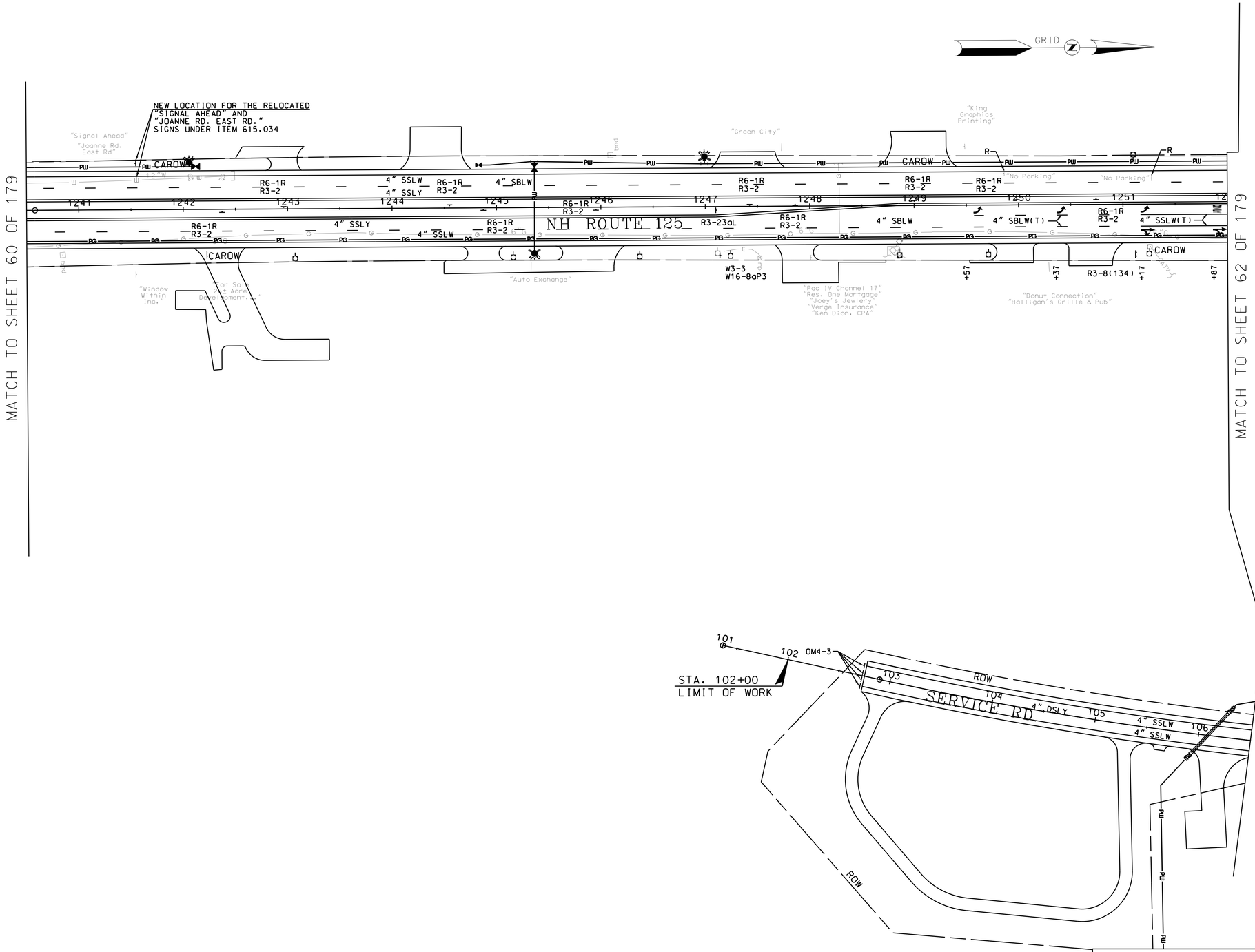
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GM02	10044G	60	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015

AS BUILT DETAILS DATE



50 0 50 100
SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

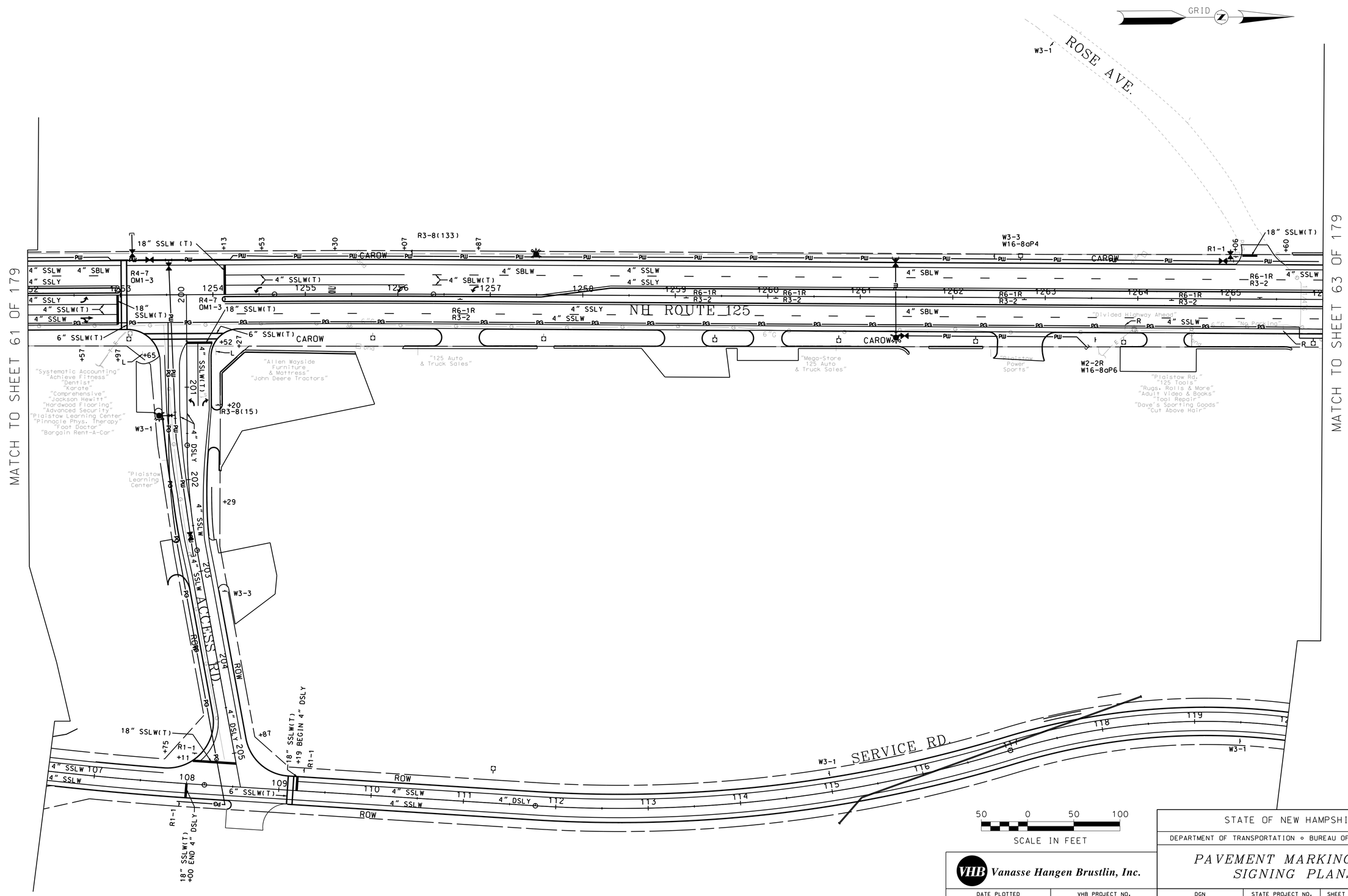
PAVEMENT MARKING AND SIGNING PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GM03	10044G	61	179

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



REVISIONS AFTER PROPOSAL			
STATION	STATION	NUMBER	DATE

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
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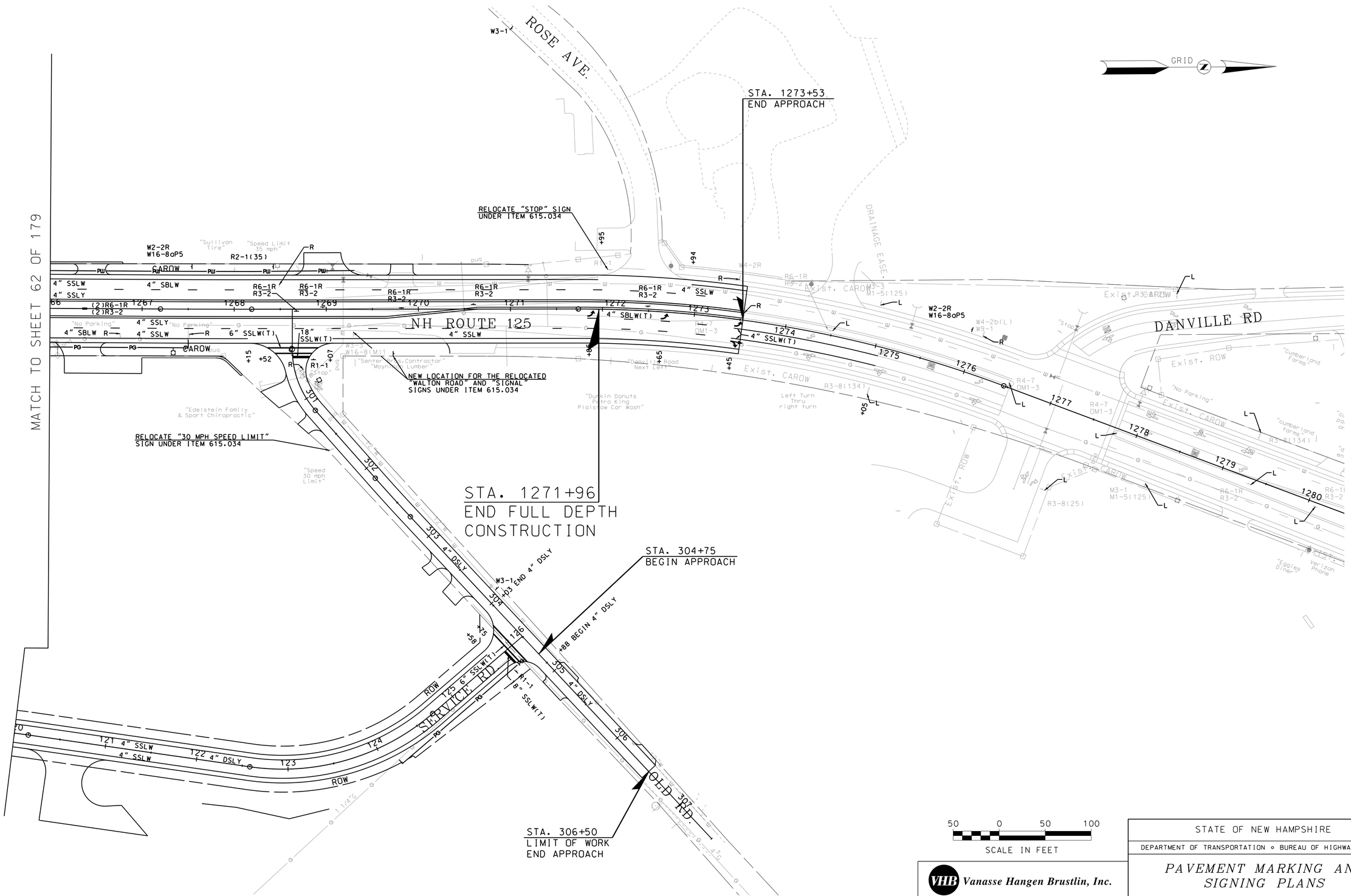
Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

PAVEMENT MARKING AND SIGNING PLANS

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GM04	10044G	62	179



50 0 50 100
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

PAVEMENT MARKING AND SIGNING PLANS

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GM05	10044G	63	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015

AS BUILT DETAILS DATE

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# OF SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAMS	CONCRETE BASE	4" ALUMINUM	U-CHANNEL-GALV.	REMARKS
615.03	R1-1	36	36	STOP			12C				6	9.00	54.00					1	WHITE / RED
615.03	R2-1(35)	30	36	SPEED LIMIT 35			6D 6D			12D	3	7.5	22.50					1	BLACK / WHITE
615.03 615.06	R3-2	24	24								36 3	4.00	144.00 12.00					1	RED, BLACK / WHITE (MOUNT BEHIND R3-2)
615.06	R3-4	24	24								2	4.00	8.00						RED & BLACK / WHITE (MOUNT BEHIND R4-7)
615.03	R3-23aL	60	36	U TURN FROM LEFT LANE			7D 7D 7C				1	15.00	15.00					2	BLACK / WHITE
615.03	R3-8(14)	36	30	ONLY			4D				1	7.50	7.50					1	BLACK / WHITE
615.03	R3-8(15)	36	30	ONLY ONLY			4D				1	7.50	7.50					1	BLACK / WHITE
615.03	R3-8(133)	48	30	ONLY			4D				1	10.00	10.00					2	BLACK / WHITE
615.03	R3-8(134)	48	30	ONLY			4D				2	10.00	20.00					2	BLACK / WHITE
615.03	R4-7	24	30								4	5.00	20.00					1	BLACK / WHITE
615.06	R6-1R	36	12	ONE WAY			4D				39	3.00	117.00						BLACK / WHITE WHITE / BLACK (MOUNT ABOVE R3-2)
615.03 615.06	R7-2M	12	18	NO PARKING			6EM 2B 2B				1 1	1.50	1.50 1.50					1	RED / WHITE (MOUNT BELOW R2-1(35))
SUBSID. TO 616.191 616.101	R10-3eL	9	15	FIRST CROSSING WITHOUT PUSH BUTTON WAITING SAFE TO START WHEN GREEN IF STARTED TIME REMAINING TO FINISH CROSSING DON'T CROSS TO CROSS PUSH BUTTON							6	0.94	5.64						BLACK / ORANGE / WHITE

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# OF SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAMS	CONCRETE BASE	4" ALUMINUM	U-CHANNEL-GALV.	REMARKS
SUBSID. TO 616.191 616.101	R10-3eR	9	15	FIRST CROSSING WITHOUT PUSH BUTTON WAITING SAFE TO START WHEN GREEN IF STARTED TIME REMAINING TO FINISH CROSSING DON'T CROSS TO CROSS PUSH BUTTON							6	0.94	5.64						BLACK / ORANGE / WHITE
615.03	W2-2R	36	36								3	9.00	27.00					1	BLACK / YELLOW
615.03	W3-1	30	30								6	6.25	37.50					1	BLACK / YELLOW / RED
615.03	W3-3	36	36								7	9.0	63.00					1	BLACK / YELLOW / RED / GREEN
615.06	W16-8aP1	42	16	← East Rd Joanne Dr →	4C 4C	3C 3C			4x4 4x4		1	4.67	4.67						BLACK / YELLOW (MOUNT BELOW W3-3)
615.06	W16-8aP2	42	8	← Westville Rd	4C	3C			4x4		1	2.33	2.33						BLACK / YELLOW (MOUNT BELOW W3-3)
615.06	W16-8aP3	42	8	Access Rd →	4C	3C			4x4		1	2.33	2.33						BLACK / YELLOW (MOUNT BELOW W3-3)
615.06	W16-8aP4	42	8	← Access Rd	4C	3C			4x4		1	2.33	2.33						BLACK / YELLOW (MOUNT BELOW W3-3)
615.06	W16-8aP5	36	8	Rose Ave	4C	3C					2	2.00	4.00						BLACK / YELLOW (MOUNT BELOW W2-2R)
615.06	W16-8aP6	36	8	Old Rd	4C	3C					1	1.33	1.33						BLACK / YELLOW (MOUNT BELOW W2-2R)

GENERAL NOTES

1. REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT).

2. REFER TO THE LATEST EDITION OF THE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AS PUBLISHED BY THE NHDOT FOR EXACT DETAILS OF PERMANENT SIGNING STANDARDS.

3. NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.

4. REFER TO THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS MANUAL AS PUBLISHED BY THE USDOT-FHWA FOR EXACT DETAILS OF BORDERS, ETC.

5. A BREAK-OUT U-POST BREAKAWAY SIGN SUPPORT SYSTEM SHALL BE USED FOR ALL U-CHANNEL POST SIGNS INSTALLED IN RAISED ISLANDS.

6. TEXT HEIGHTS SHOWN IN THE UC AND LC COLUMNS SHALL MEAN THE UPPER CASE TEXT SIZE AND ITS ASSOCIATED LOWER CASE TEXT SIZE.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SIGN TEXT LAYOUT

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
8/20/2015	51272.01	10044GTSSS.dgn	10044G	64	179

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# OF SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAMS	CONCRETE BASE	4" ALUMINUM	U-CHANNEL-GALV.	REMARKS
615.06	OM1-3	18	18								4	2.25	9.00						YELLOW (MOUNT BELOW R4-7)
615.03	OM4-3	18	18								4	2.25	9.00					1	RED
615.03	M1-5(125)	24	24							12B	2	4.00	8.00					1	BLACK / WHITE
615.06	M3-1	24	12				6C*				1	2.0	2.0						(*=MAKE FIRST LETTER 10% LARGER) BLACK / WHITE (MOUNT ABOVE M1-5(125)
615.06	M3-3	24	12				6C*				1	2.0	2.0						(*=MAKE FIRST LETTER 10% LARGER) BLACK / WHITE (MOUNT ABOVE M1-5(125)
SUBSID. TO 616.191 616.101	D3-1a	72	16		8B	6B					2	8.00	16.00						WHITE / GREEN (MOUNT ON MAST ARM)
SUBSID. TO 616.101	D3-1b	54	16		8B 6B	6B 4.5B					2	6.00	12.00						WHITE / GREEN (MOUNT ON MAST ARM)
SUBSID. TO 616.191	D3-1f	30	12		6C 4C	4.5C 3C					1	2.50	2.50						WHITE / GREEN BLADE MOUNT TO MAST ARM UPRIGHT
SUBSID. TO 616.191	D3-1g	36	12		6C 4C	4.5C 3C					1	3.00	3.00						WHITE / GREEN BLADE MOUNT TO MAST ARM UPRIGHT

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# OF SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAMS	CONCRETE BASE	4" ALUMINUM	U-CHANNEL-GALV.	REMARKS

GENERAL NOTES

1. REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT).
2. REFER TO THE LATEST EDITION OF THE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AS PUBLISHED BY THE NHDOT FOR EXACT DETAILS OF PERMANENT SIGNING STANDARDS.
3. NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.
4. REFER TO THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS MANUAL AS PUBLISHED BY THE USDOT-FHWA FOR EXACT DETAILS OF BORDERS, ETC.
5. A BREAK-OUT U-POST BREAKAWAY SIGN SUPPORT SYSTEM SHALL BE USED FOR ALL U-CHANNEL POST SIGNS INSTALLED IN RAISED ISLANDS.
6. TEXT HEIGHTS SHOWN IN THE UC AND LC COLUMNS SHALL MEAN THE UPPER CASE TEXT SIZE AND ITS ASSOCIATED LOWER CASE TEXT SIZE.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION	STATION

SDR PROCESSED VHB TEAM DATE 7/2009
NEW DESIGN F. KOCZALKA DATE 9/2014
SHEET CHECKED A. GRANDE DATE 8/2015
AS BUILT DETAILS DATE

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SIGN TEXT LAYOUT

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
8/20/2015	51272.01	10044GTSSS.dgn	10044G	65	179

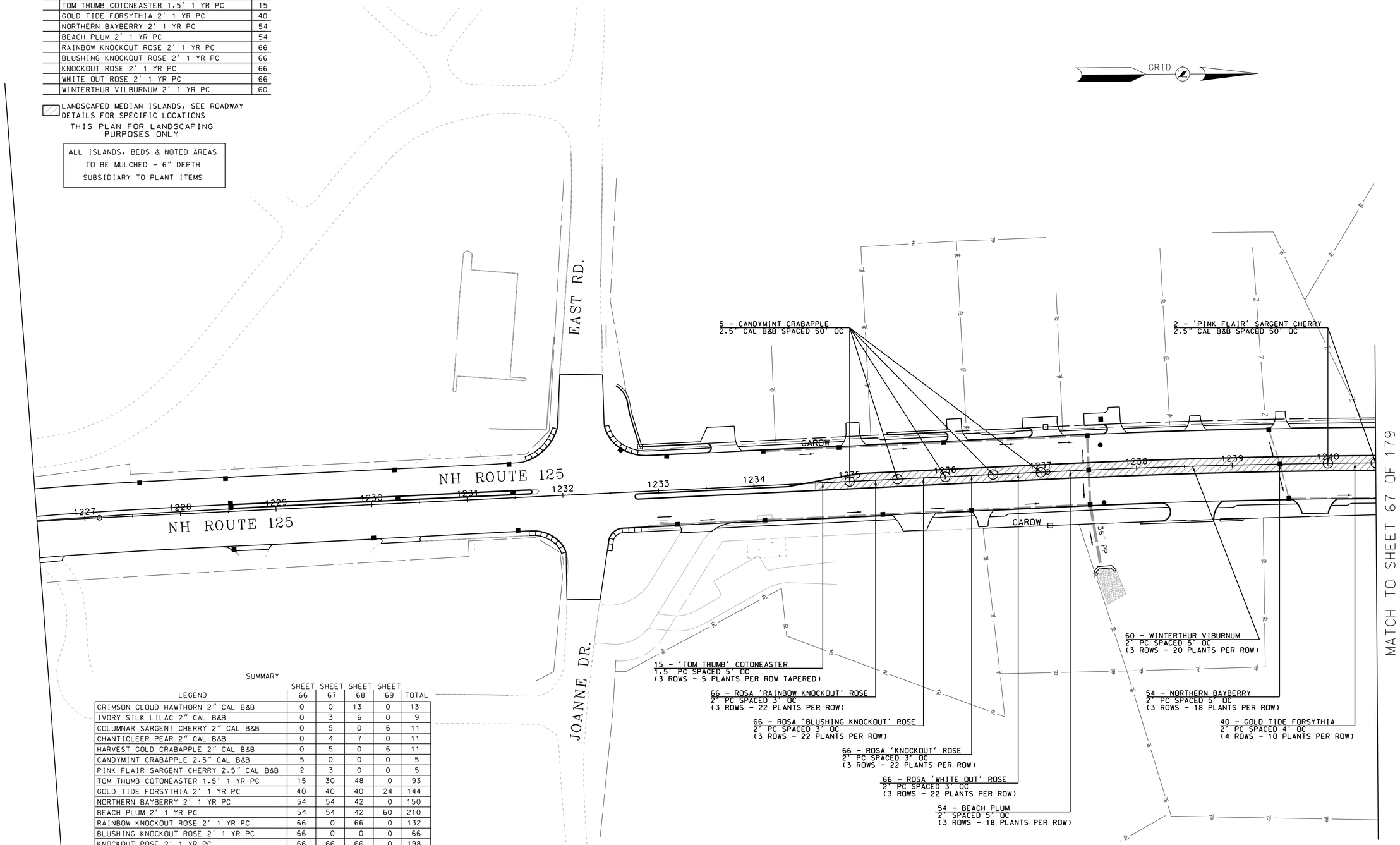
LEGEND

	CANDYMINT CRABAPPLE 2.5" CAL B&B	5
	PINK FLAIR SARGENT CHERRY 2.5" CAL B&B	2
	TOM THUMB COTONEASTER 1.5' 1 YR PC	15
	GOLD TIDE FORSYTHIA 2' 1 YR PC	40
	NORTHERN BAYBERRY 2' 1 YR PC	54
	BEACH PLUM 2' 1 YR PC	54
	RAINBOW KNOCKOUT ROSE 2' 1 YR PC	66
	BLUSHING KNOCKOUT ROSE 2' 1 YR PC	66
	KNOCKOUT ROSE 2' 1 YR PC	66
	WHITE OUT ROSE 2' 1 YR PC	66
	WINTERTHUR VILBURNUM 2' 1 YR PC	60

LANDSCAPED MEDIAN ISLANDS, SEE ROADWAY DETAILS FOR SPECIFIC LOCATIONS

THIS PLAN FOR LANDSCAPING PURPOSES ONLY

ALL ISLANDS, BEDS & NOTED AREAS TO BE MULCHED - 6" DEPTH SUBSIDIARY TO PLANT ITEMS



SUMMARY

LEGEND	SHEET 66	SHEET 67	SHEET 68	SHEET 69	TOTAL
CRIMSON CLOUD HAWTHORN 2" CAL B&B	0	0	13	0	13
IVORY SILK LILAC 2" CAL B&B	0	3	6	0	9
COLUMNAR SARGENT CHERRY 2" CAL B&B	0	5	0	6	11
CHANTICLEER PEAR 2" CAL B&B	0	4	7	0	11
HARVEST GOLD CRABAPPLE 2" CAL B&B	0	5	0	6	11
CANDYMINT CRABAPPLE 2.5" CAL B&B	5	0	0	0	5
PINK FLAIR SARGENT CHERRY 2.5" CAL B&B	2	3	0	0	5
TOM THUMB COTONEASTER 1.5' 1 YR PC	15	30	48	0	93
GOLD TIDE FORSYTHIA 2' 1 YR PC	40	40	40	24	144
NORTHERN BAYBERRY 2' 1 YR PC	54	54	42	0	150
BEACH PLUM 2' 1 YR PC	54	54	42	60	210
RAINBOW KNOCKOUT ROSE 2' 1 YR PC	66	0	66	0	132
BLUSHING KNOCKOUT ROSE 2' 1 YR PC	66	0	0	0	66
KNOCKOUT ROSE 2' 1 YR PC	66	66	66	0	198
WHITE OUT ROSE 2' 1 YR PC	66	66	66	0	198
WINTERTHUR VILBURNUM 2' 1 YR PC	60	60	42	0	162
CRIMSON CLOUD HAWTHORN 2.5" CAL B&B	0	5	0	0	5
DWARF HOREAN LILAC 3' 1 YR PC	0	24	0	48	72
TINKERBELLE LILAC 2' 1 YR PC	0	24	48	48	120
CORALBURST CRABAPPLE 2.5" CAL B&B	0	0	4	0	4
ARISTOCRAT PEAR 2.5" CAL B&B	0	0	7	0	7
GOLD STAR POTENTILLA 2' 1 YR PC	0	0	40	0	40
SNOW STORM SPIREA 2' 1 YR PC	0	0	55	42	97
JAPANESE TREE LILAC 2.5" CAL B&B	0	0	0	5	5

50 0 50 100

SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

LANDSCAPE PLAN

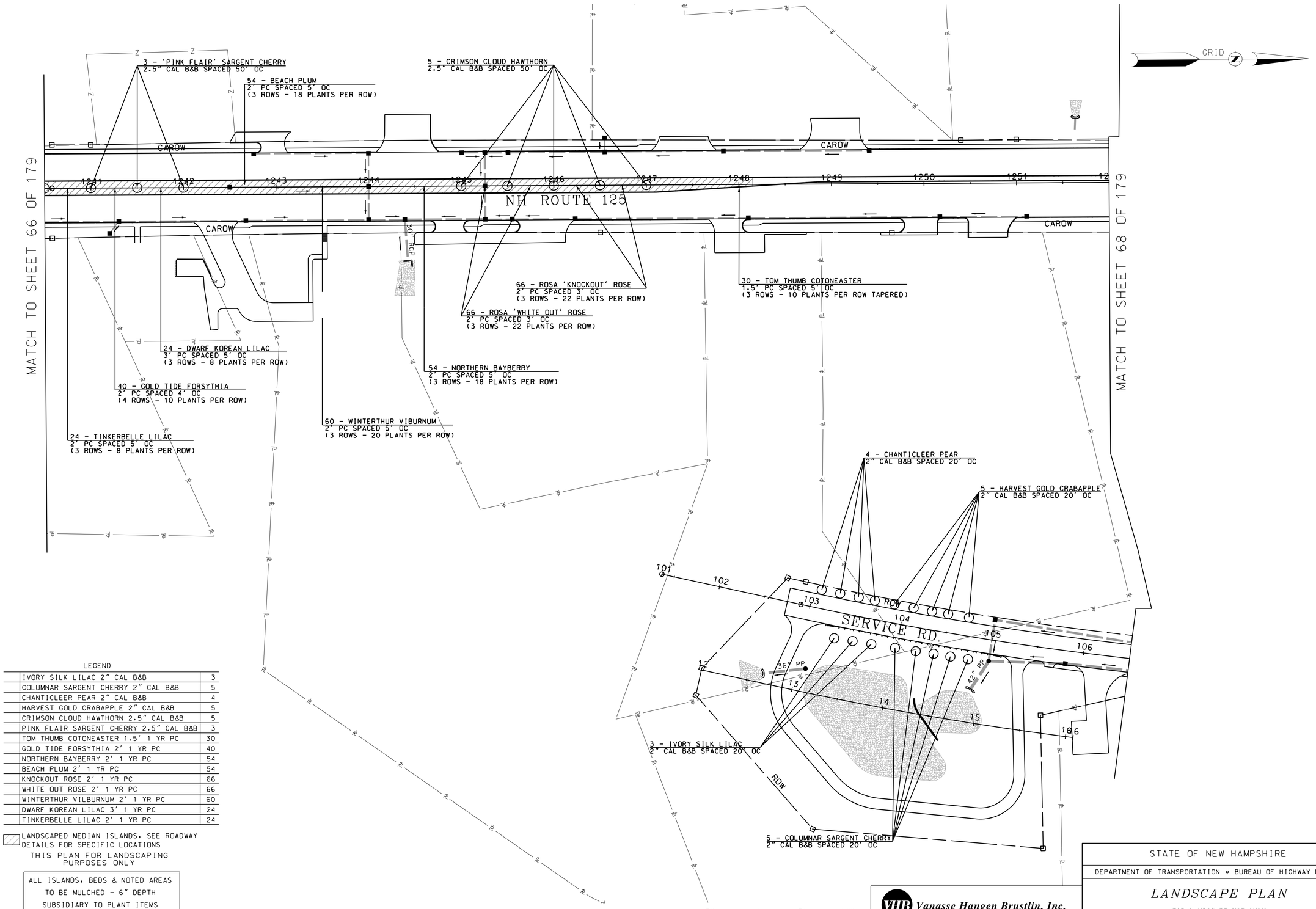
(FOR LANDSCAPE USE ONLY)

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GL02	10044G	66	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	



LEGEND

	IVORY SILK LILAC 2" CAL B&B	3
	COLUMNAR SARGENT CHERRY 2" CAL B&B	5
	CHANTICLEER PEAR 2" CAL B&B	4
	HARVEST GOLD CRABAPPLE 2" CAL B&B	5
	CRIMSON CLOUD HAWTHORN 2.5" CAL B&B	5
	PINK FLAIR SARGENT CHERRY 2.5" CAL B&B	3
	TOM THUMB COTONEASTER 1.5' 1 YR PC	30
	GOLD TIDE FORSYTHIA 2' 1 YR PC	40
	NORTHERN BAYBERRY 2' 1 YR PC	54
	BEACH PLUM 2' 1 YR PC	54
	KNOCKOUT ROSE 2' 1 YR PC	66
	WHITE OUT ROSE 2' 1 YR PC	66
	WINTERTHUR VILBURNUM 2' 1 YR PC	60
	DWARF KOREAN LILAC 3' 1 YR PC	24
	TINKERBELLE LILAC 2' 1 YR PC	24

LANDSCAPED MEDIAN ISLANDS. SEE ROADWAY DETAILS FOR SPECIFIC LOCATIONS

THIS PLAN FOR LANDSCAPING PURPOSES ONLY

ALL ISLANDS, BEDS & NOTED AREAS TO BE MULCHED - 6" DEPTH SUBSIDIARY TO PLANT ITEMS

REVISIONS AFTER PROPOSAL			
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SDR PROCESSED	VHB TEAM	DATE 7/2009
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VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

LANDSCAPE PLAN

(FOR LANDSCAPE USE ONLY)

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GL03	10044G	67	179

LEGEND

	IVORY SILK LICAL 2" CAL B&B	6
	CRIMSON CLOUD HAWTHORN 2" CAL B&B	13
	CHANTICLEER PEAR 2" CAL B&B	7
	CORALBURST CRABAPPLE 2.5" CAL B&B	4
	ARISTOCRAT PEAR 2.5" CAL B&B	7
	TOM THUMB COTONEASTER 1.5' 1 YR PC	48
	GOLD TIDE FORSYTHIA 2' 1 YR PC	40
	NORTHERN BAYBERRY 2' 1 YR PC	42
	GOLD STAR POTENTILLA 2' 1 YR PC	40
	BEACH PLUM 2' 1 YR PC	42
	RAINBOW KNOCKOUT ROSE 2' 1 YR PC	66
	KNOCKOUT ROSE 2' 1 YR PC	66
	WHITE OUT ROSE 2' 1 YR PC	66
	WINTERTHUR VILBURNUM 2' 1 YR PC	42
	TINKERBELLE LILAC 2' 1 YR PC	48
	SNOW STORM SPIREA 2' 1 YR PC	55

LANDSCAPED MEDIAN ISLANDS. SEE ROADWAY DETAILS FOR SPECIFIC LOCATIONS

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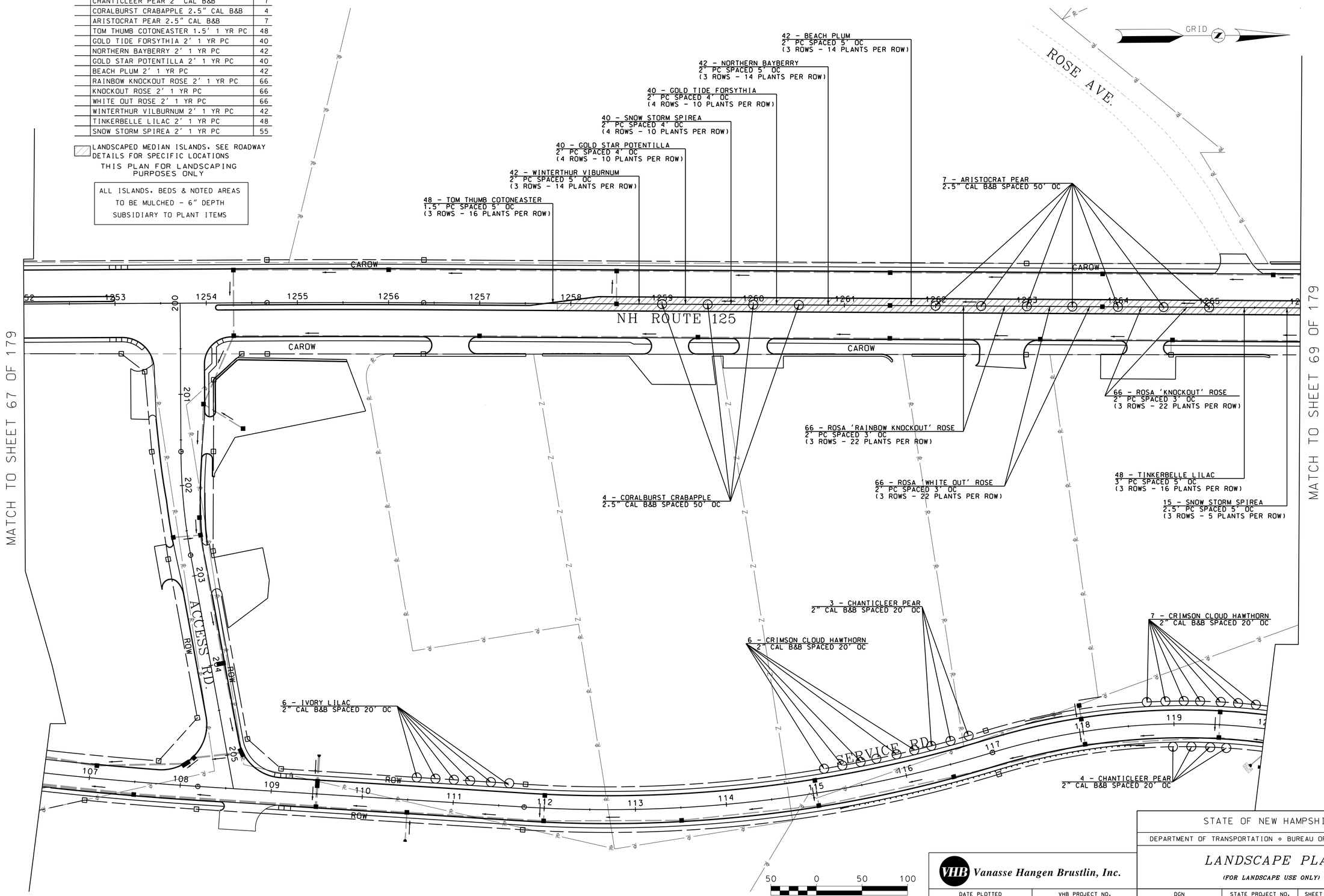

REVISIONS AFTER PROPOSAL			
STATION	STATION	NUMBER	DATE	DESCRIPTION

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NEW DESIGN	F. KOCZALKA	DATE	9/2014
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Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

LANDSCAPE PLAN

(FOR LANDSCAPE USE ONLY)

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GL04	10044G	68	179

LEGEND

COLUMNAR SARGENT CHERRY 2" CAL B&B	6
HARVEST GOLD CRABAPPLE 2" CAL B&B	6
JAPANESE TREE LILAC 2.5" CAL B&B	5
GOLD TIDE FORSYTHIA 2' 1 YR PC	24
BEACH PLUM 2' 1 YR PC	60
DWARF KOREAN LILAC 3' 1 YR PC	48
TINKERBELLE LILAC 2' 1 YR PC	48
SNOW STORM SPIREA 2' 1 YR PC	42

LANDSCAPED MEDIAN ISLANDS. SEE ROADWAY DETAILS FOR SPECIFIC LOCATIONS

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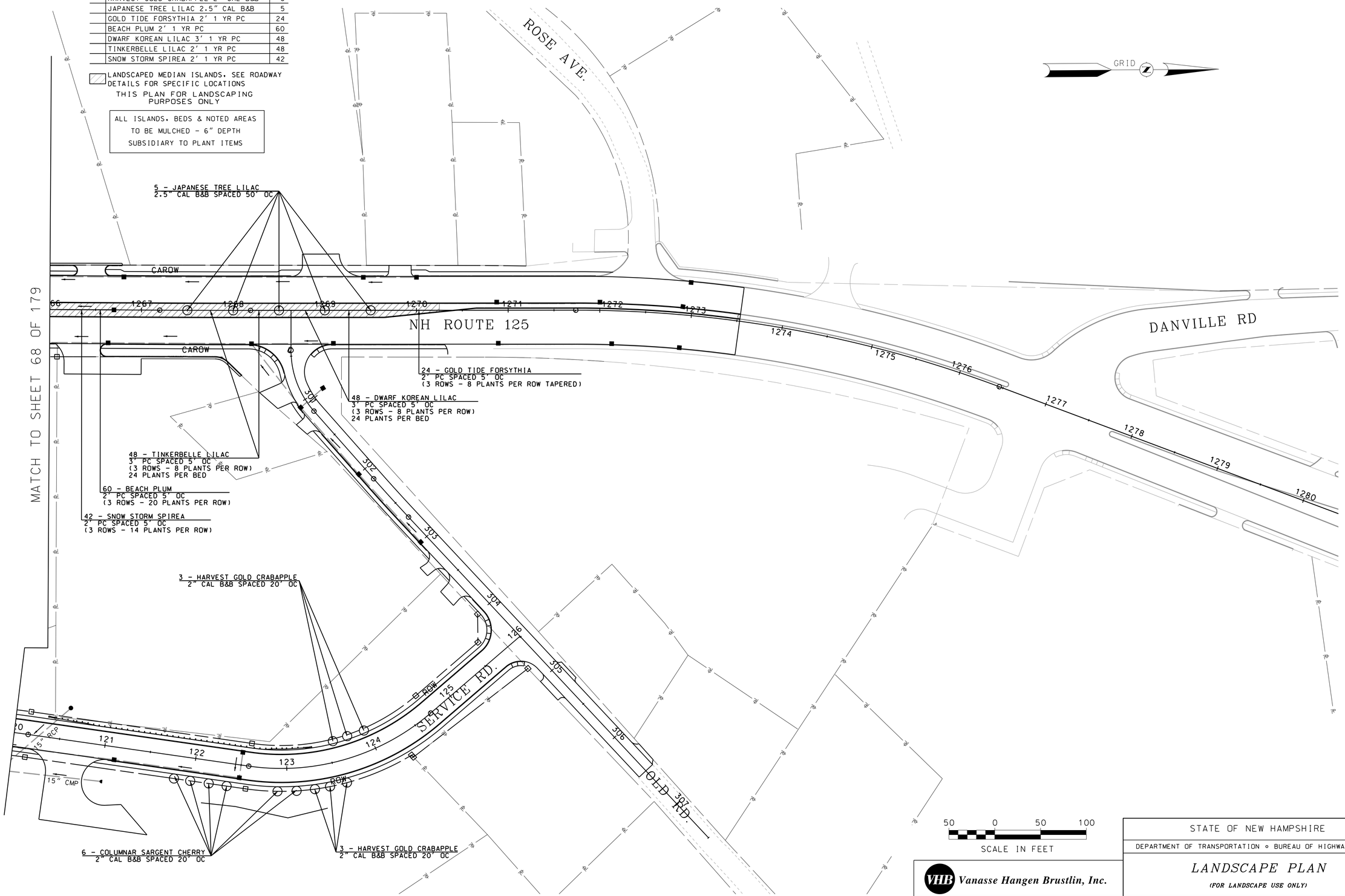
ALL ISLANDS, BEDS & NOTED AREAS TO BE MULCHED - 6" DEPTH SUBSIDIARY TO PLANT ITEMS



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NUMBER	DATE	STATION	STATION	DESCRIPTION
REVISIONS AFTER PROPOSAL				

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

LANDSCAPE PLAN

(FOR LANDSCAPE USE ONLY)

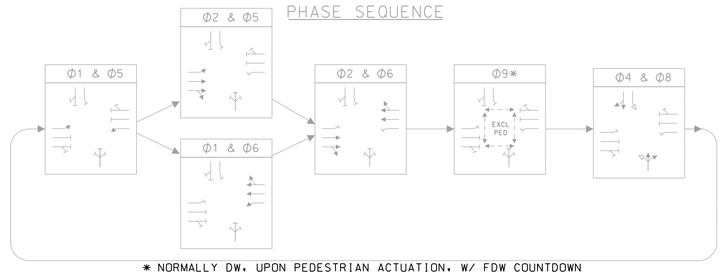
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GL05	10044G	69	179

SIGNAL HEAD DATA

EXISTING		PROPOSED	
1,5	2,4,6	8	P1-P8
12" LENS	12" LENS	12" LENS	16" x 18" LED HOUSING
WITH 5" RETROREFLECTIVE LOUVERED BACKPLATES			

- ALL SIGNAL HEADS SHALL BE EQUIPPED WITH L.E.D. MODULES -

EXISTING N.E.M.A. PHASE SEQUENCE



* NORMALLY DW. UPON PEDESTRIAN ACTUATION. W/ FDW COUNTDOWN

DETECTOR SCHEDULE

DETECTOR				AMPLIFIER		INDUCT UH	RESISTANCE OF LOOPS	RESIST. LOOP GRD. MEG.	RESIST. SHIELD GRD. MEG.
STREET	DIRECTION	LANE	Φ	NO.	CHANNEL				
NH ROUTE 125	NORTHBOUND	LEFT	5	1	1				
NH ROUTE 125	NORTHBOUND	THROUGH	2	2	1				
NH ROUTE 125	NORTHBOUND	THRU-RIGHT	2	2	2				
NH ROUTE 125	SOUTHBOUND	LEFT	1	3	1				
NH ROUTE 125	SOUTHBOUND	THROUGH	6	4	1				
NH ROUTE 125	SOUTHBOUND	THRU-RIGHT	6	4	2				
EAST ROAD	EASTBOUND	LEFT	4	5	1				
EAST ROAD	EASTBOUND	THRU-RIGHT	4	5	2				
JOANNE DRIVE	WESTBOUND	LEFT-THRU-RIGHT	8	6	1				
NH ROUTE 125	NORTHBOUND	LEFT	S7	7	1				
NH ROUTE 125	NORTHBOUND	RIGHT	S8	7	2				
NH ROUTE 125	SOUTHBOUND	RIGHT	S5	8	1				
NH ROUTE 125	SOUTHBOUND	LEFT	S6	8	2				
RECORD FIELD MEASUREMENTS HERE									

2016 SYSTEM DESIGN VOLUMES AM(PM)[SAT]

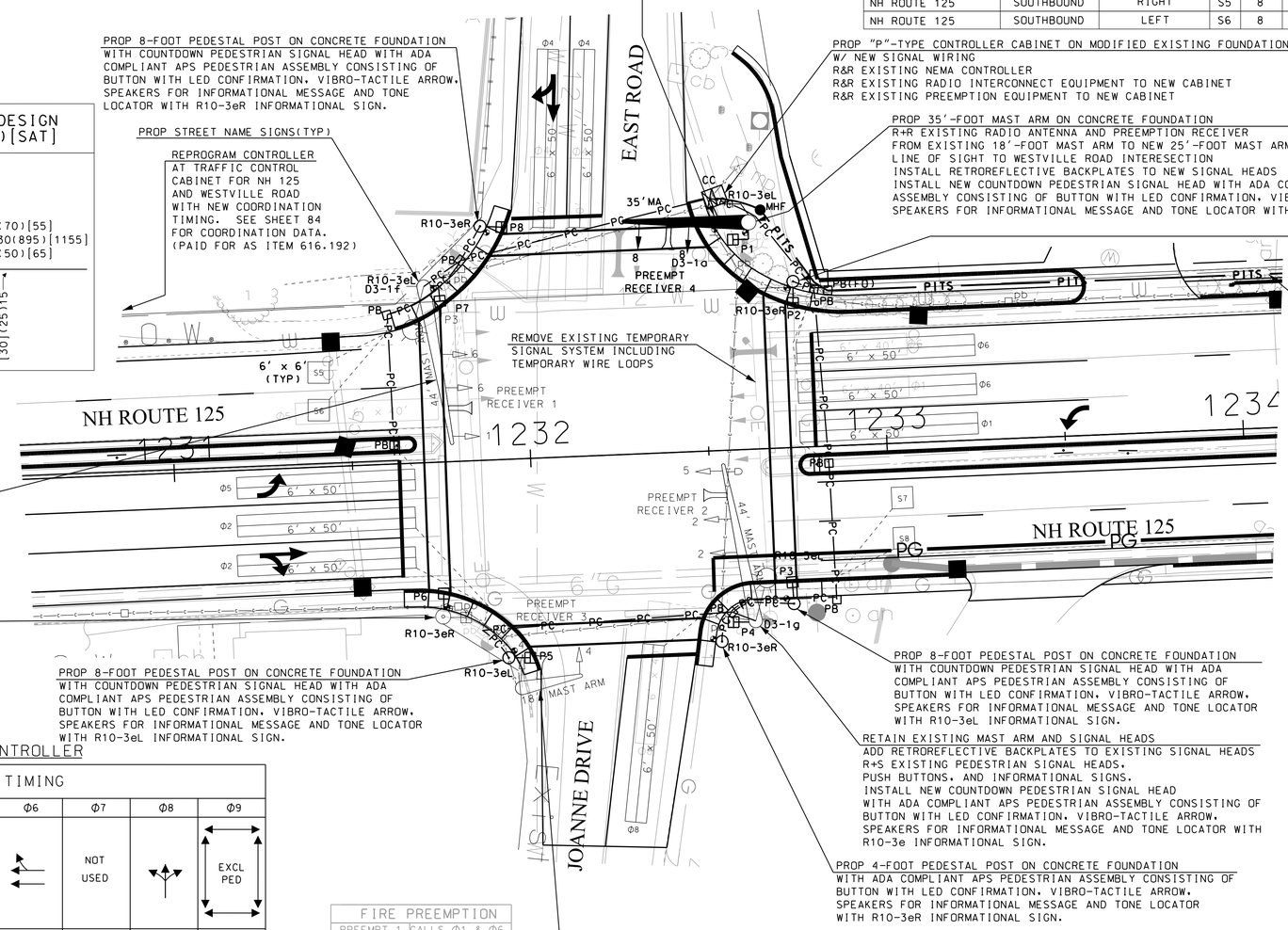
265(220)[290]
10(10)[15]
70(80)[75]
55(60)[50]
1010(800)[1030]
55(50)[60]
[285](405)160
[1030](1170)425
[5](5)0
[25](25)5
[15](15)0
[25](20)10

2024 ROADWAY DESIGN VOLUMES AM(PM)[SAT]

295(295)[320]
15(15)[20]
80(95)[90]
65(70)[55]
1130(895)[1155]
60(50)[65]
[315](455)185
[1155](1305)480
[5](5)0
[30](30)5
[20](20)0
[30](25)15

MAST ARM FOUNDATIONS

LOCATION	TYPE
STA 1232+64, LT 64'	TYPE 2-30R



PROPOSED SIGNS

R10-3eR
9"x15"
4 - PROPOSED

R10-3eL
9"x15"
4 - PROPOSED

NH Route 125
D3-1a
72"X16"
1-PROPOSED

East Rd
D3-1f
30"X12"
1-PROPOSED

Joanne Dr
D3-1g
36"X12"
1-PROPOSED

ITEM 616.191

ITEM 616.192

CONSTRUCTION NOTES
SEE SHEET 71

EXISTING NEMA DUAL RING CONTROLLER

PROPOSED SIGNAL PHASING & TIMING

	Φ1	Φ2	Φ3	Φ4	Φ5	Φ6	Φ7	Φ8	Φ9
			NOT USED				NOT USED		EXCL PED
INITIAL INTERVAL	5	7	-	5	7	7	-	5	-
VEHICLE EXTENSION	4	4	-	4	4	4	-	4	-
MAXIMUM 1	20	45	-	25	25	45	-	25	-
MAXIMUM 2	15	60	-	30	35	60	-	30	-
YELLOW	4.0	4.0	-	4.0	4.0	4.0	-	4.0	3.0
ALL RED	2.0	2.0	-	2.0	2.0	2.0	-	2.0	0.0
PEDESTRIAN WALK	-	-	-	-	-	-	-	-	4
PEDESTRIAN CLEAR	-	-	-	-	-	-	-	-	20
FLASH	FR	FY	-	FR	FR	FY	-	FR	DARK
RECALL	OFF	SOFT	-	OFF	OFF	SOFT	-	OFF	-
DETECTOR	NL	NL	-	NL	NL	NL	-	NL	-
PRE-EMPT PRIORITY	1	2	-	3	2	1	-	4	-

L = LOCKING FY = FLASH YELLOW
NL = NON-LOCKING FR = FLASH RED
MAXIMUM 2 SHALL OPERATE DURING COORDINATION

FIRE PREEMPTION

PREEMPT 1	CALLS Φ1 & Φ6
PREEMPT 2	CALLS Φ2 & Φ5
PREEMPT 3	CALLS Φ4
PREEMPT 4	CALLS Φ8
EXIT TO Φ2 & Φ6	

FIRE PREEMPTION NOTES:

1. PRE-EMPTION SIGNALS SHALL BE SERVICED ON A FIRST COME, FIRST SERVED BASIS.
2. MINIMUM GREEN AND NORMAL VEHICLE CLEARANCE TIMES SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY PRE-EMPTION DEMAND.
3. THE LOCATION OF EMERGENCY VEHICLE PRE-EMPTION RECEIVERS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR, THE ENGINEER, AND THE TOWN OF PLAISTOW FIRE DEPARTMENT.
4. EMERGENCY VEHICLE PREEMPTION SHALL OVERRIDE COORDINATION

LEGEND

PROPOSED	REMARKS
	OVERHEAD SIGN
MHF	FIBER OPTIC MANHOLE
	WIRELESS INTERCONNECT DEVICE

20 0 20 40
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SIGNALIZATION PLAN
NH125 AND EAST RD/JOANNE DR

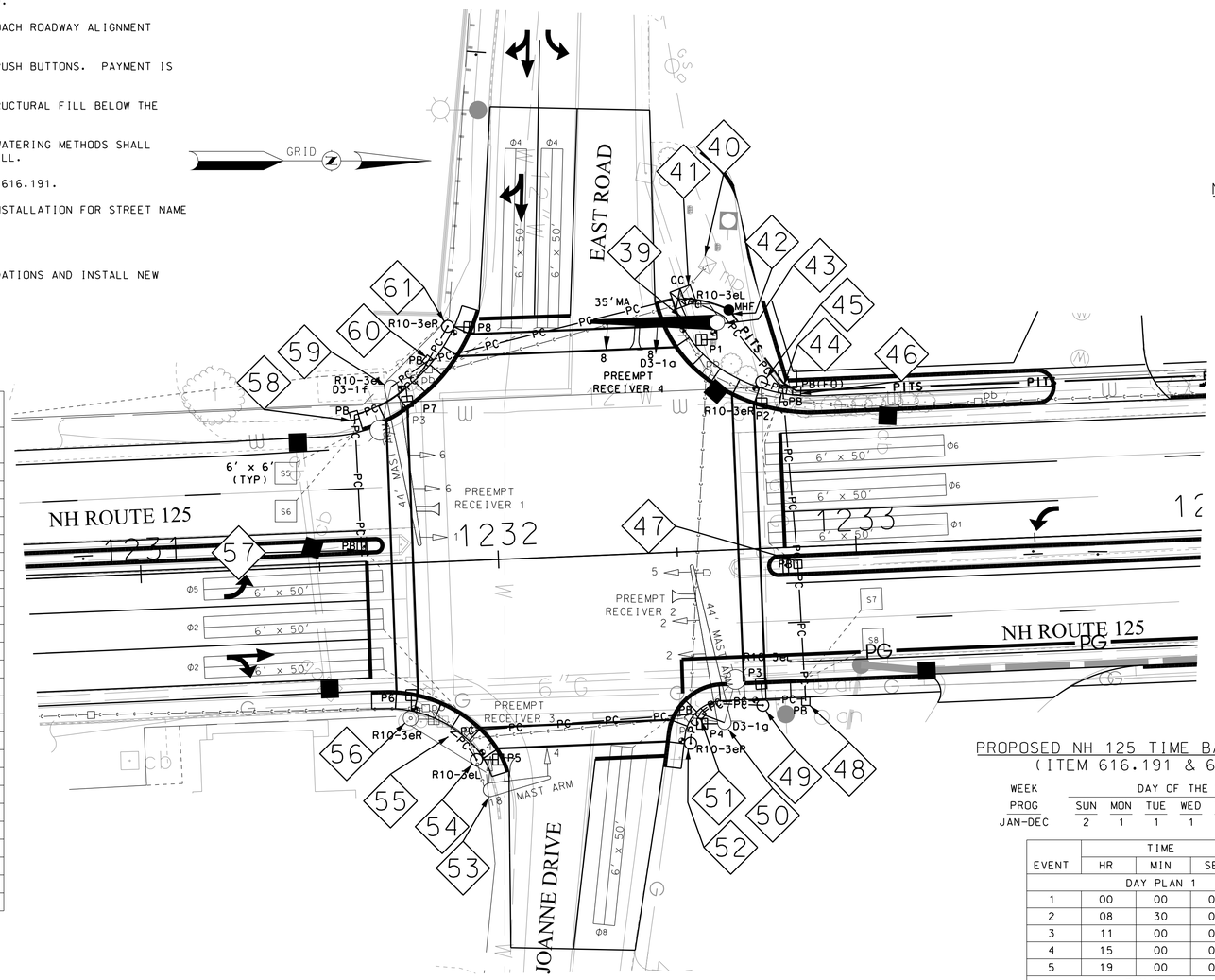
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GSIG1	10044G	70	179

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

CONSTRUCTION NOTES:

1. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED HEREIN USING NEW MATERIALS. THE TERM "REMOVE AND SALVAGE"(R+S) MEANS EQUIPMENT TO BE REMOVED AND DELIVERED TO A LOCATION AS DIRECTED BY THE ENGINEER. THE TERM "REMOVE AND RELOCATE" (R+R) MEANS EQUIPMENT TO BE REMOVED AND RE-USED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
2. QUADRUPOLE LOOPS SHALL HAVE 2-4-2 LOOP WIRE CONFIGURATION.
3. EACH LOOP SHALL HAVE ITS OWN SEPARATE LEAD-IN WIRE INSTALLED FROM THE LOOP LOCATION TO THE CONTROLLER CABINET.
4. PAVEMENT SAWCUTTING FOR LOOP DETECTOR INSTALLATION, CONDUITS AND JACKING PITS (WHEN REQUIRED) SHALL BE SUBSIDIARY TO ITEM 616.191. REPLACEMENT OF PAVEMENT FOR CONDUIT TRENCHES AND JACKING PITS WILL BE PAID UNDER ITEM 403.12 OR 403.99.
5. MAST ARMS ON SIGNAL POLES SHALL BE ORIENTED PERPENDICULAR TO APPROACH ROADWAY ALIGNMENT UNLESS OTHERWISE NOTED.
6. R10-3e SIGNS SHALL BE INSTALLED IMMEDIATELY ABOVE THE PEDESTRIAN PUSH BUTTONS. PAYMENT IS INCLUDED UNDER ITEM 616.191.
7. ALL MAST ARM POLE FOUNDATIONS SHALL INCLUDE A 12 INCH LAYER OF STRUCTURAL FILL BELOW THE BOTTOM OF THE FOOTING GRADE.
8. ANY BEARING SURFACE MATERIAL DISTURBED BY EXCAVATION AND/OR BY DEWATERING METHODS SHALL BE REMOVED TO A DEPTH OF 12 INCHES AND REPLACED WITH STRUCTURAL FILL.
9. PLACEMENT OF STRUCTURAL FILL MATERIAL SHALL BE SUBSIDIARY TO ITEM 616.191.
10. SEE SPECIAL PROVISION 616.191 FOR STREET NAME SIGN PLACEMENT. INSTALLATION FOR STREET NAME SIGNS SHALL BE SUBSIDIARY TO ITEM 616.191.
11. EXISTING LIGHTING AND POWER SOURCE SHALL BE MAINTAINED.
12. CONTRACTOR SHALL EXPOSE EXISTING CONDUIT SWEEPS AT EXISTING FOUNDATIONS AND INSTALL NEW CONDUIT FROM THE ENDS OF THE SWEEPS.
13. A TRACE WIRE SHALL BE INSTALLED ABOVE ALL CONDUIT CONTAINING DIELECTIC FIBER OPTIC CABLE. TRACE WIRE SHALL BE SUBSIDIARY TO ITEM 614.74221.
14. FIBER OPTIC CABLE SHALL NOT BE SPLICED. FIBERS NOT TERMINATED IN A SPLICE ENCLOSURE OR SHOWN AS THROUGH FIBERS SHALL NOT BE CUT.
15. THE TERMINATED FIBERS IN THE CABINET SHALL BE TERMINATED ON A 12-POSITION PATCH PANEL.



PROPOSED FOUNDATION SCHEDULE

I.D. #	STATION	FOUNDATION TYPE	REMARKS
39	STA. 1232+56 LT 64'	TSFND	PROPOSED PEDESTRIAN PEDESTAL
40	STA. 1232+62 LT 80'	tsfnd	existing meter pedestal
41	STA. 1232+55 LT 72'	CCFND	PROPOSED CONTROLLER CABINET
42	STA. 1232+67 LT 67'	MHF	PROPOSED MANHOLE
43	STA. 1232+64 LT 64'	TYPE 2-30R	W/ ANCHOR BOLTS FOR SIGNAL POLE
44	STA. 1232+82 LT 44'	PB	PROPOSED PULL BOX
45	STA. 1232+76 LT 47'	TSFND	PROPOSED PEDESTRIAN PEDESTAL
46	STA. 1232+86 LT 44'	PB(FO)	PROPOSED FIBER OPTIC PULL BOX
47	STA. 1232+84 RT 05'	PB	PROPOSED PULL BOX
48	STA. 1232+84 RT 43'	PB	PROPOSED PULL BOX
49	STA. 1232+72 RT 44'	TSFND	PROPOSED PEDESTRIAN PEDESTAL
50	STA. 1232+62 RT 48'	-	existing mast arm pole
51	STA. 1232+55 RT 46'	PB	PROPOSED PULL BOX
52	STA. 1232+52 RT 54'	TSFND	PROPOSED PEDESTRIAN PEDESTAL
53	STA. 1231+95 RT 64'	-	existing mast arm pole
54	STA. 1231+92 RT 56'	TSFND	PROPOSED PEDESTRIAN PEDESTAL
55	STA. 1231+85 RT 48'	PB	PROPOSED PULL BOX
56	STA. 1231+74 RT 43'	tsfnd	existing pedestrian pedestal
57	STA. 1231+62 LT 05'	PB	PROPOSED PULL BOX
58	STA. 1231+62 LT 42'	PB	PROPOSED PULL BOX
59	STA. 1231+72 LT 50'	-	existing mast arm pole
60	STA. 1231+83 LT 57'	PB	PROPOSED PULL BOX
61	STA. 1231+89 LT 66'	TSFND	PROPOSED PEDESTRIAN PEDESTAL
62*	STA. 1238+80 LT 43'	PB(FO)	PROPOSED FIBER OPTIC PULL BOX
63*	STA. 1245+76 LT 44'	PB(FO)	PROPOSED FIBER OPTIC PULL BOX

* SEE INTERCONNECT SHEETS FOR ITEM 62 AND 63

WHERE:

TYPE # = TRAFFIC SIGNAL MAST ARM FOUNDATION CONSTRUCTED IN ACCORDANCE WITH NHDOT TRAFFIC SIGNAL STANDARD TS-1, TS-2, OR TS-3 AS APPLICABLE.

PB = 14-INCH CONCRETE PULL BOX CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARD SL-1

PB(E) = 17 x 30-INCH MOLDED ELECTRIC PULLBOX (HANDHOLE FOR PSNH LIGHTING) CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARD SL-1

CCFND = CONCRETE FOUNDATION FOR CONTROLLER CABINETS CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARDS SL-2

TSFND = CONCRETE FOUNDATION FOR PEDESTALS (SIGNAL AND METER) CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARDS SL-2

PB(FO) = 17 x 30-INCH MOLDED PULLBOX (FIBER OPTIC PULL BOX) CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARD SL-1 AND DETAIL FO-1

MHF = 30-INCH FIBER OPTIC MANHOLE CONSTRUCTED IN ACCORDANCE WITH DETAIL FO-1

NH 125 AT JOANNE DR / EAST RD (ITEM 616.191)
COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

	PLAN 1	PLAN 2	PLAN 3	PLAN 4	PLAN 5	PLAN 6
CYCLE LENGTH	FREE OPERATIONS	110	120	120	130	140
OFFSET		15	8	8	11	8
SPLIT TIME Φ1		16	16	16	20	20
SPLIT TIME Φ2		46	55	55	62	71
SPLIT TIME Φ3		0	0	0	0	0
SPLIT TIME Φ4		20	21	21	20	21
SPLIT TIME Φ5		21	30	30	31	35
SPLIT TIME Φ6		41	41	41	51	56
SPLIT TIME Φ7		0	0	0	0	0
SPLIT TIME Φ8		20	21	21	20	21
SPLIT TIME Φ9		28	28	28	28	28
SPLIT TIME Φ10		28	28	28	28	28

COORDINATION NOTES:

1. OFFSET IS REFERENCED TO THE END OF COORDINATED PHASE 2 GREEN.
2. SPLIT TIMES ARE SHOWN IN SECONDS.
3. PLAN 1 = FREE OPERATIONS
   PLAN 2 = PROPOSED WEEKDAY AM PEAK PLAN
   PLAN 3 = PROPOSED WEEKDAY MIDDAY PEAK PLAN
   PLAN 4 = PROPOSED WEEKDAY PM PEAK PLAN
   PLAN 5 = PROPOSED WEEKEND PEAK PLAN
   PLAN 6 = PROPOSED WEEKEND PEAK PLAN
4. FORCE OFFS ARE FIXED AND MAX 2 UNDER COORDINATION.
5. SHORT AND LONG WAY TRANSITIONS AT 17% AND 22% AND RETURN HOLD ACTIVE.
6. PHASE 10 IS A DUMMY PHASE FOR NTCIP COORDINATED PROGRAMMING.

PROPOSED NH 125 TIME BASED SCHEDULE
(ITEM 616.191 & 616.192)

WEEK PROG	SUN	MON	TUE	WED	THU	FRI	SAT
JAN-DEC	2	1	1	1	1	1	2

EVENT	TIME HR	TIME MIN	TIME SEC	PLAN
DAY PLAN 1				
1	00	00	00	1
2	08	30	00	2
3	11	00	00	3
4	15	00	00	4
5	19	00	00	1
DAY PLAN 2				
1	00	00	00	1
2	10	00	00	2
3	11	30	00	5
4	14	00	00	2
5	18	00	00	1

NH 125 AT WESTVILLE RD (ITEM 616.192)
COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

	PLAN 1	PLAN 2	PLAN 3	PLAN 4	PLAN 5	PLAN 6
CYCLE LENGTH	FREE OPERATIONS	110	120	120	130	140
OFFSET		70	75	75	76	84
SPLIT TIME Φ1		23	21	21	21	26
SPLIT TIME Φ2		36	46	46	51	56
SPLIT TIME Φ3		0	0	0	0	0
SPLIT TIME Φ4		24	26	26	31	31
SPLIT TIME Φ5		0	0	0	0	0
SPLIT TIME Φ6		59	67	67	72	82
SPLIT TIME Φ7		0	0	0	0	0
SPLIT TIME Φ8		24	26	26	31	31
SPLIT TIME Φ9		27	27	27	27	27
SPLIT TIME Φ10		27	27	27	27	27

COORDINATION NOTES:

1. OFFSET IS REFERENCED TO THE END OF COORDINATED PHASE 2 GREEN.
2. SPLIT TIMES ARE SHOWN IN SECONDS.
3. PLAN 1 = FREE OPERATIONS
   PLAN 2 = PROPOSED WEEKDAY AM PEAK PLAN
   PLAN 3 = PROPOSED WEEKDAY MIDDAY PEAK PLAN
   PLAN 4 = PROPOSED WEEKDAY PM PEAK PLAN
   PLAN 5 = PROPOSED WEEKEND PEAK PLAN
   PLAN 6 = PROPOSED WEEKEND PEAK PLAN
4. FORCE OFFS ARE FIXED AND MAX 2 UNDER COORDINATION.
5. SHORT AND LONG WAY TRANSITIONS AT 17% AND 22% AND RETURN HOLD ACTIVE.
6. PHASE 10 IS A DUMMY PHASE FOR NTCIP COORDINATED PROGRAMMING.

20 0 20 40
SCALE IN FEET

ITEM 616.191

ITEM 616.192

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SIGNALIZATION PLAN
NH125 AND EAST RD/JOANNE DR

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSIG1A	10044G	71	179

NUMBER	DATE	STATION	STATION	DESCRIPTION

REVISIONS AFTER PROPOSAL

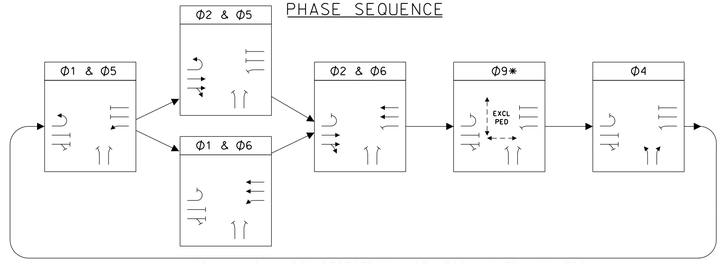
SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

SIGNAL HEAD DATA

PROPOSED				
5	1	2,4	2A,6A	P1-P4
12" LENS	12" LENS	12" LENS	12" LENS	16" x 18" LED HOUSING
WITH 5" RETROREFLECTIVE LOUVERED BACKPLATES				

- ALL SIGNAL HEADS SHALL BE EQUIPPED WITH L.E.D. MODULES -

N.E.M.A. PHASE SEQUENCE



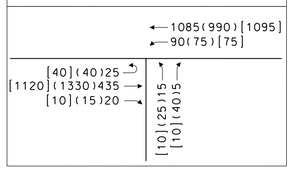
* = NORMALLY DW. UPON PEDESTRIAN ACTUATION. W/FDW COUNTDOWN

DETECTOR SCHEDULE

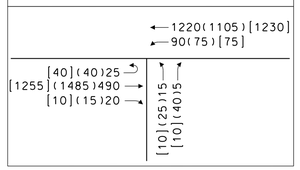
DETECTOR				AMPLIFIER		INDUCT UH	RESISTANCE OF LOOPS	RESIST. LOOP GRD. MEG.	RESIST. SHIELD GRD. MEG.
STREET	DIRECTION	LANE	Ø	NO.	CHANNEL				
NH ROUTE 125	NORTHBOUND	U-TURN	5	1	1				
NH ROUTE 125	NORTHBOUND	THRU	2	2	1				
NH ROUTE 125	NORTHBOUND	THRU-RIGHT	2	2	2				
NH ROUTE 125	SOUTHBOUND	LEFT	1	3	1				
NH ROUTE 125	SOUTHBOUND	THRU (LEFT)	6	4	1				
NH ROUTE 125	SOUTHBOUND	THRU (RIGHT)	6	4	2				
ACCESS DRIVE	WESTBOUND	LEFT	4	5	1				
ACCESS DRIVE	WESTBOUND	RIGHT	4D	5	2				
NH ROUTE 125	SOUTHBOUND	RIGHT	S5	6	1				
NH ROUTE 125	SOUTHBOUND	LEFT	S6	6	2				
NH ROUTE 125	NORTHBOUND	LEFT	S7	7	1				
NH ROUTE 125	NORTHBOUND	RIGHT	S8	7	2				
						RECORD FIELD MEASUREMENTS HERE			

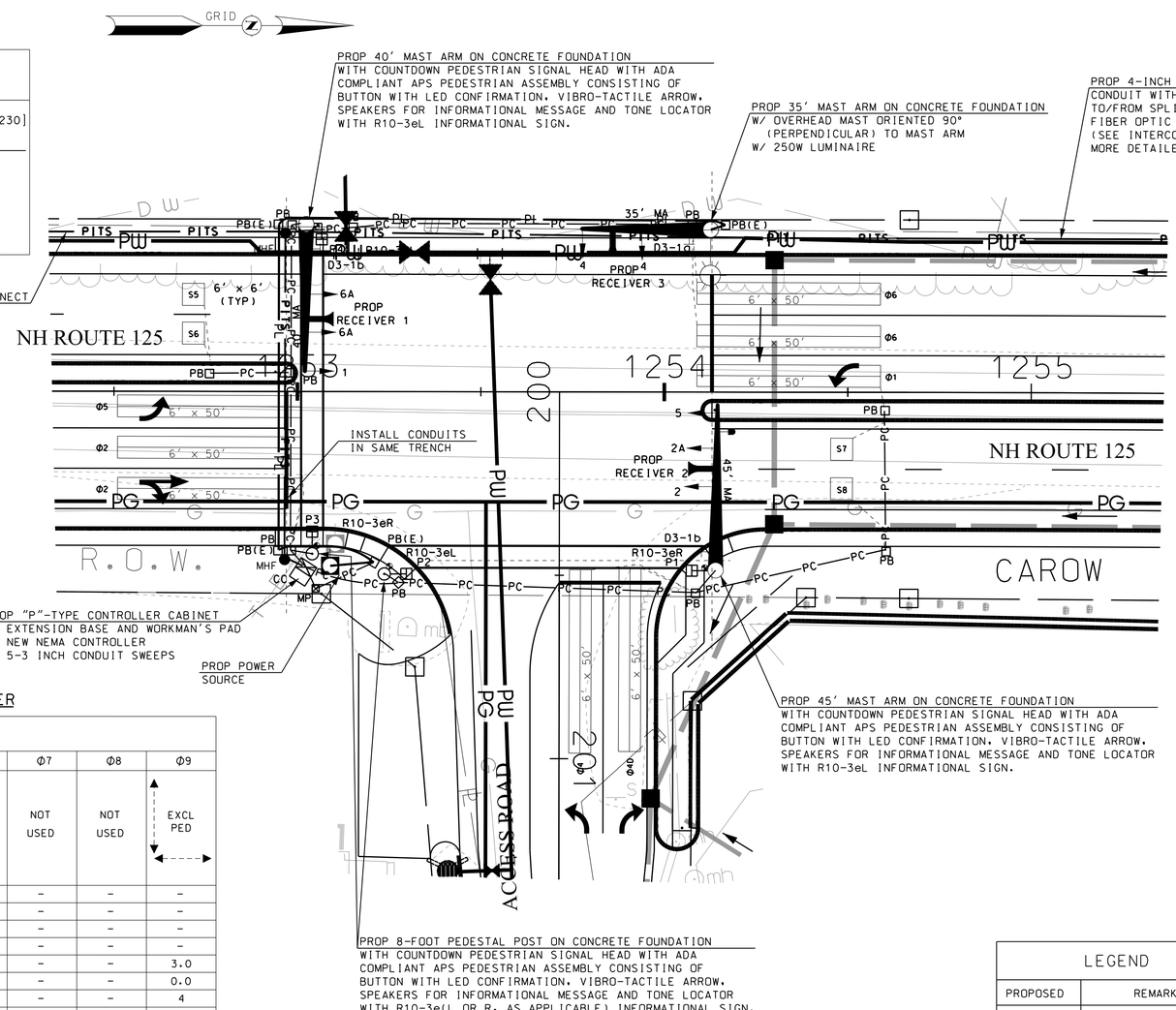
LOOP 4D SHALL BE SET WITH 5 SECONDS DELAY

2016 SYSTEM DESIGN VOLUMES AM(PM)[SAT]



2024 ROADWAY DESIGN VOLUMES AM(PM)[SAT]





FIRE PREEMPTION

PREEMPT 1	CALLS Φ1 & Φ6
PREEMPT 2	CALLS Φ2 & Φ5
PREEMPT 3	CALLS Φ4
EXIT TO Φ2 & Φ6	

FIRE PREEMPTION NOTES:

1. PREEMPTION SIGNALS SHALL BE SERVICED ON A FIRST COME, FIRST SERVED BASIS.
2. MINIMUM GREEN AND NORMAL VEHICLE CLEARANCE TIMES SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY PRE-EMPTION DEMAND.
3. THE LOCATION OF EMERGENCY VEHICLE PRE-EMPTION RECEIVERS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR, THE ENGINEER, AND THE TOWN OF PLAISTOW FIRE DEPARTMENT.
4. EMERGENCY VEHICLE PREEMPTION SHALL OVERRIDE COORDINATION

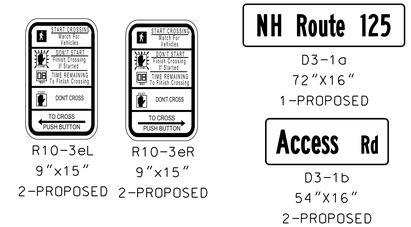
PROPOSED NEMA DUAL RING CONTROLLER

SIGNAL PHASING & TIMING

	Φ1	Φ2	Φ3	Φ4	Φ5	Φ6	Φ7	Φ8	Φ9
			NOT USED				NOT USED	NOT USED	EXCL PED
INITIAL INTERVAL	8	10	-	8	8	10	-	-	-
VEHICLE EXTENSION	3	5	-	3	4	5	-	-	-
MAXIMUM 1	20	40	-	20	20	40	-	-	-
MAXIMUM 2	25	40	-	25	25	40	-	-	-
YELLOW	4.0	4.0	-	4.0	4.0	4.0	-	-	3.0
ALL RED	2.0	2.0	-	2.0	2.0	2.0	-	-	0.0
PEDESTRIAN WALK	-	-	-	-	-	-	-	-	4
PEDESTRIAN CLEAR	-	-	-	-	-	-	-	-	22
FLASH	FR	FY	-	FR	FR	FY	-	-	DARK
RECALL	OFF	SOFT	-	OFF	OFF	SOFT	-	-	-
DETECTOR	NL	NL	-	NL	NL	NL	-	-	-
PRE-EMPT PRIORITY	1	2	-	3	2	1	-	-	-

L = LOCKING FR = FLASH RED
NL = NON-LOCKING FY = FLASH YELLOW
MAXIMUM 2 SHALL OPERATE DURING COORDINATION

PROPOSED SIGNS



TEST BORINGS

HOLE ID	LOCATION
B707	STA 1253+00, LT 50'
B708	STA 1254+30, LT 50'
B709	STA 1254+00, RT 54'

MAST ARM FOUNDATIONS

LOCATION	TYPE
STA. 1253+02 LT 46'	TYPE 2-36R-B
STA. 1254+13 LT 44'	TYPE 2 30R
STA. 1254+14 RT 49'	TYPE 1C

ITEM 616.101

CONSTRUCTION NOTES
SEE SHEET 73

LEGEND

PROPOSED	REMARKS
⊣	OVERHEAD SIGN
● MHF	FIBER OPTIC MANHOLE

20 0 20 40
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SIGNALIZATION PLAN
NH125 AND ACCESS ROAD

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GSIG2	10044G	72	179

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

CONSTRUCTION NOTES:

1. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED HEREIN USING NEW MATERIALS. THE TERM "REMOVE AND SALVAGE"(R+S) MEANS EQUIPMENT TO BE REMOVED AND DELIVERED TO A LOCATION AS DIRECTED BY THE ENGINEER. THE TERM "REMOVE AND RELOCATE" (R+R) MEANS EQUIPMENT TO BE REMOVED AND RE-USED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
2. QUADRUPOLE LOOPS SHALL HAVE 2-4-2 LOOP WIRE CONFIGURATION.
3. EACH LOOP SHALL HAVE ITS OWN SEPARATE LEAD-IN WIRE INSTALLED FROM THE LOOP LOCATION TO THE CONTROLLER CABINET.
4. PAVEMENT SAWCUTTING FOR LOOP DETECTOR INSTALLATION, CONDUITS AND JACKING PITS (WHEN REQUIRED) SHALL BE SUBSIDIARY TO ITEM 616.101. REPLACEMENT OF PAVEMENT FOR CONDUIT TRENCHES AND JACKING PITS WILL BE PAID UNDER ITEM 403.12 OR 403.99.
5. MAST ARMS ON SIGNAL POLES SHALL BE ORIENTED PERPENDICULAR TO APPROACH ROADWAY ALIGNMENT UNLESS OTHERWISE NOTED.
6. R10-11a(M) SIGNS SHALL BE INSTALLED ADJACENT TO AND TO THE RIGHT OF SIGNAL HEADS 1 AND 5. R10-3 SIGNS SHALL BE INSTALLED IMMEDIATELY ABOVE THE PEDESTRIAN PUSH BUTTONS. PAYMENT IS INCLUDED UNDER ITEM 616.101.
7. PERMANENT LIGHTING SHALL CONSIST OF ONE 250 WATT HIGH PRESSURE SODIUM (HPS) FULL-CUTOFF TYPE 3 LUMINAIRES, OR APPROVED EQUIVALENT. LUMINAIRES SHALL BE MOUNTED ON A 12 FOOT BRACKET ARM.
8. ALL MAST ARM POLE FOUNDATIONS SHALL INCLUDE A 12 INCH LAYER OF STRUCTURAL FILL BELOW THE BOTTOM OF THE FOOTING GRADE.
9. ANY BEARING SURFACE MATERIAL DISTURBED BY EXCAVATION AND/OR BY DEWATERING METHODS SHALL BE REMOVED TO A DEPTH OF 12 INCHES AND REPLACED WITH STRUCTURAL FILL.
10. PLACEMENT OF STRUCTURAL FILL MATERIAL SHALL BE SUBSIDIARY TO ITEM 616.101.
11. SEE SPECIAL PROVISION 616.101 FOR STREET NAME SIGN PLACEMENT. INSTALLATION FOR STREET NAME SIGNS SHALL BE SUBSIDIARY TO ITEM 616.101.
12. A TRACE WIRE SHALL BE INSTALLED ABOVE ALL CONDUIT CONTAINING DIELECTIC FIBER OPTIC CABLE. TRACE WIRE SHALL BE SUBSIDIARY TO ITEM 614.74221.
13. FIBER OPTIC CABLE SHALL NOT BE SPLICED. FIBERS NOT TERMINATED IN A SPLICE ENCLOSURE OR SHOWN AS THROUGH FIBERS SHALL NOT BE CUT.
14. THE TERMINATED FIBERS IN THE SPLICE ENCLOSURE SHALL BE TERMINATED ON A 12-POSITION PATCH PANEL.

PROPOSED FOUNDATION SCHEDULE

I.D. #	STATION	FOUNDATION TYPE	REMARKS
1	STA. 1252+98 RT 43'	PB	PROPOSED PULL BOX
2	STA. 1252+94 RT 43'	PB(E)	MOLDED ELECTRICAL HANDHOLE
3	STA. 1252+96 RT 45'	MHF	PROPOSED MANHOLE
4	STA. 1253+02 RT 48'	CCFND	PROPOSED CONTROLLER CABINET
5	STA. 1253+05 RT 54'	TSFND	PROPOSED METER PEDESTAL
6	STA. 1253+09 RT 49'	-	POWER SOURCE
7	STA. 1253+24 RT 50'	TSFND	PROPOSED PEDESTRIAN PEDESTAL
8	STA. 1253+28 RT 52'	PB	PROPOSED PULL BOX
9	STA. 1253+04 RT 44'	TSFND	PROPOSED PEDESTRIAN PEDESTAL
10	STA. 1253+21 RT 47'	PB(E)	MOLDED ELECTRICAL HANDHOLE
11	STA. 1254+09 RT 55'	PB	PROPOSED PULL BOX
13	STA. 1254+14 RT 49'	TYPE 1C	W/ ANCHOR BOLTS FOR SIGNAL POLE
14	STA. 1254+60 RT 43'	PB	PROPOSED PULL BOX
15	STA. 1254+60 RT 05'	PB	PROPOSED PULL BOX
16	STA. 1252+98 LT 05'	PB	PROPOSED PULL BOX
17	STA. 1252+76 LT 05'	PB	PROPOSED PULL BOX
18	STA. 1252+95 LT 46'	PB(E)	MOLDED ELECTRICAL HANDHOLE
19	STA. 1252+97 LT 44'	MHF	PROPOSED MANHOLE
20	STA. 1252+98 LT 46'	PB	PROPOSED PULL BOX
21	STA. 1253+02 LT 46'	TYPE 2-900R-B	W/ ANCHOR BOLTS FOR SIGNAL POLE
22	STA. 1253+15 LT 45'	PB	PROPOSED PULL BOX
23	STA. 1254+08 LT 46'	PB	PROPOSED PULL BOX
24	STA. 1254+13 LT 44'	TYPE 2 30R	W/ ANCHOR BOLTS FOR SIGNAL POLE
25*	STA. 1260+15 LT 43'	PB(FO)	PROPOSED FIBER OPTIC PULL BOX
26	STA. 1267+20 LT 43'	mhf	existing manhole **
27	STA. 1254+17 LT 46'	PB(E)	MOLDED ELECTRICAL HANDHOLE

* SEE INTERCONNECT SHEETS FOR ADDITIONAL EQUIPMENT
** INSTALLED BY OTHERS UNDER CONTRACT 10044F
ID # 12 - NOT USED

WHERE:

TYPE # = TRAFFIC SIGNAL MAST ARM FOUNDATION CONSTRUCTED IN ACCORDANCE WITH NHDOT TRAFFIC SIGNAL STANDARD TS-1, TS-2, OR TS-3 AS APPLICABLE.

PB = 14-INCH CONCRETE PULL BOX CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARD SL-1

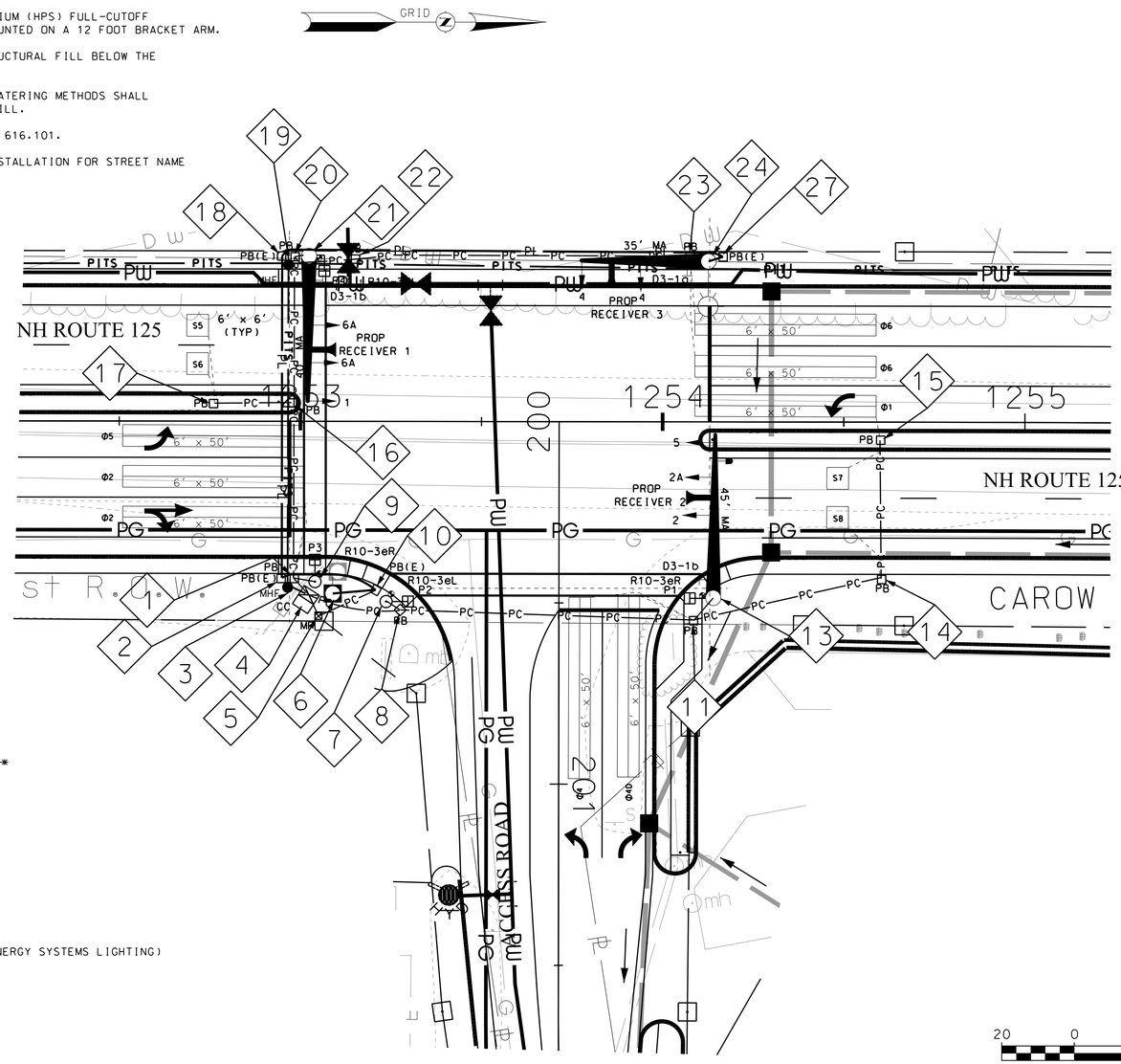
PB(E) = 17 x 30-INCH MOLDED ELECTRIC PULLBOX (HANDHOLE FOR UNITIL ENERGY SYSTEMS LIGHTING) CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARD SL-1

CCFND = CONCRETE FOUNDATION FOR CONTROLLER CABINETS CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARDS SL-2

TSFND = CONCRETE FOUNDATION FOR PEDESTALS (SIGNAL AND METER) CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARDS SL-2

PB(FO) = 17 x 30-INCH MOLDED PULLBOX (FIBER OPTIC PULL BOX) CONSTRUCTED IN ACCORDANCE WITH NHDOT SIGNAL AND LIGHTING STANDARD SL-1 AND DETAIL FO-1

MHF = 30-INCH FIBER OPTIC MANHOLE CONSTRUCTED IN ACCORDANCE WITH DETAIL FO-1



NH 125 AT ACCESS RD

COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

	PLAN 1	PLAN 2	PLAN 3	PLAN 4	PLAN 5	PLAN 6
CYCLE LENGTH	FREE OPERATIONS	110	120	120	130	140
OFFSET		41	74	74	80	74
SPLIT TIME Φ1		20	20	20	20	20
SPLIT TIME Φ2		44	52	52	62	72
SPLIT TIME Φ3		0	0	0	0	0
SPLIT TIME Φ4		16	18	18	18	18
SPLIT TIME Φ5		16	18	18	18	18
SPLIT TIME Φ6		48	54	54	64	74
SPLIT TIME Φ7		0	0	0	0	0
SPLIT TIME Φ8		16	18	18	18	18
SPLIT TIME Φ9		30	30	30	30	30
SPLIT TIME Φ10		30	30	30	30	30

COORDINATION NOTES:

1. OFFSET IS REFERENCED TO THE BEGINNING OF COORDINATED PHASE 2 GREEN.
2. SPLIT TIMES ARE SHOWN IN SECONDS.
3. PLAN 1 = FREE OPERATIONS
   PLAN 2 = PROPOSED WEEKDAY AM PEAK PLAN
   PLAN 3 = PROPOSED WEEKDAY MIDDAY PEAK PLAN
   PLAN 4 = PROPOSED WEEKDAY PM PEAK PLAN
   PLAN 5 = PROPOSED WEEKEND PEAK PLAN
   PLAN 6 = PROPOSED WEEKEND PEAK PLAN
4. FORCE OFFS ARE FIXED AND MAX 2 UNDER COORDINATION.
5. SHORT AND LONG WAY TRANSITIONS AT 10% AND 24% AND RETURN HOLD ACTIVE.
6. PHASES 8 AND 10 ARE DUMMY PHASES FOR NTCIP COORDIATED PROGRAMMING.

PROPOSED NH 125 TIME BASED SCHEDULE

WEEK PROG	SUN	MON	TUE	WED	THU	FRI	SAT
JAN-DEC	2	1	1	1	1	1	2

EVENT	TIME HR	TIME MIN	TIME SEC	PLAN
DAY PLAN 1				
1	00	00	00	1
2	08	30	00	2
3	11	00	00	3
4	15	00	00	4
5	19	00	00	1
DAY PLAN 2				
1	00	00	00	1
2	10	00	00	2
3	11	30	00	5
4	14	00	00	2
5	18	00	00	1

ITEM 616.101

20 0 20 40
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

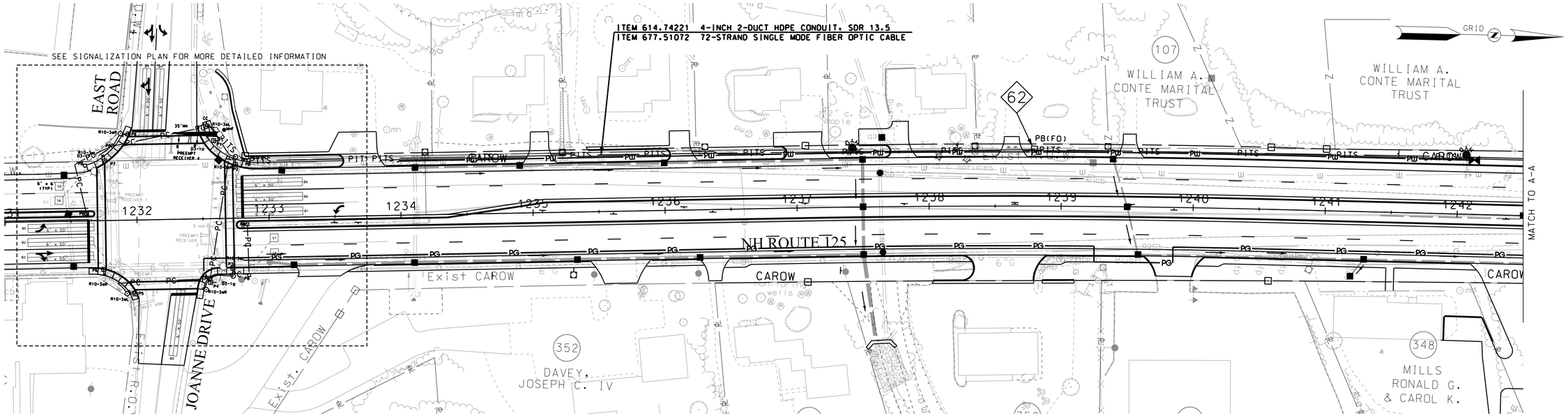
SIGNALIZATION PLAN
NH125 AND ACCESS ROAD

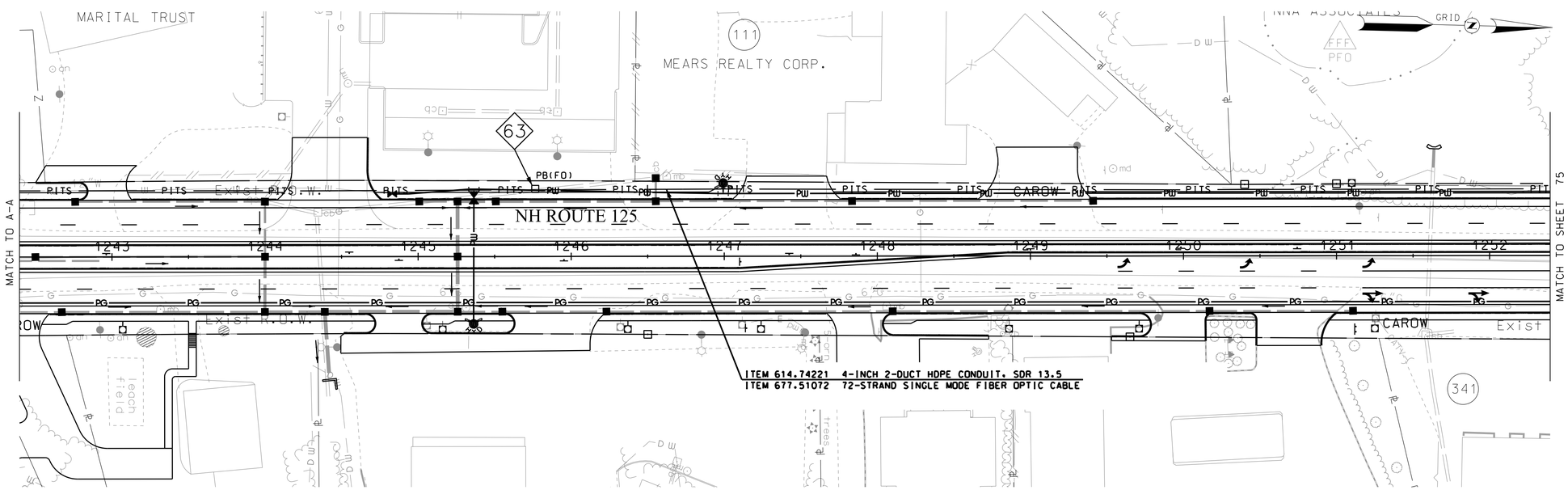
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GSIG2A	10044G	73	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE





ITEM 616.151

40 0 40 80
SCALE IN FEET

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

NUMBER	DATE	STATION	DESCRIPTION

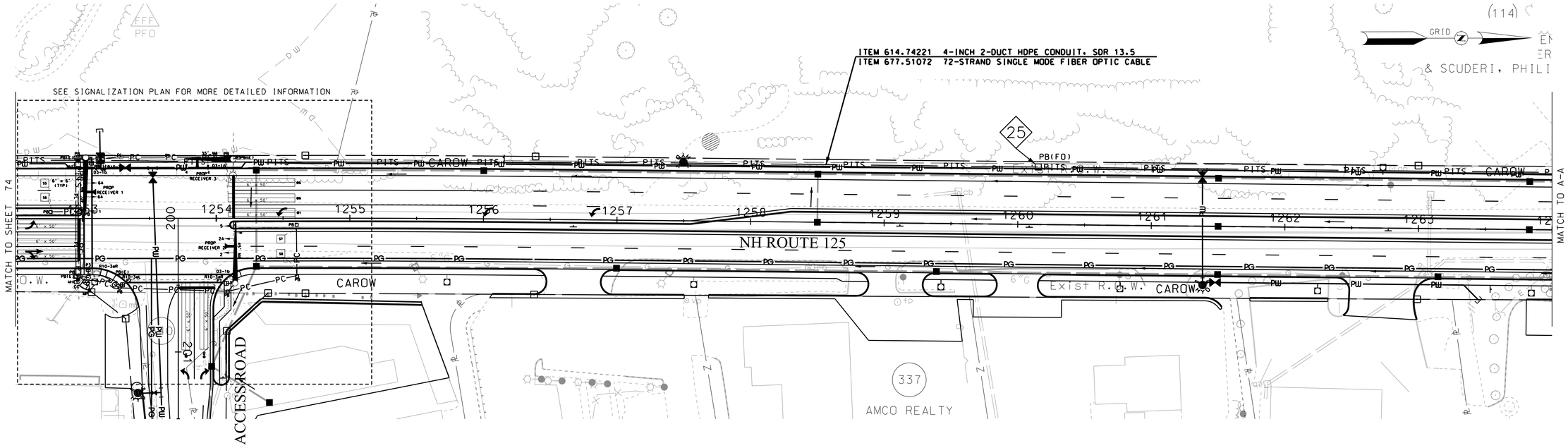
REVISIONS AFTER PROPOSAL

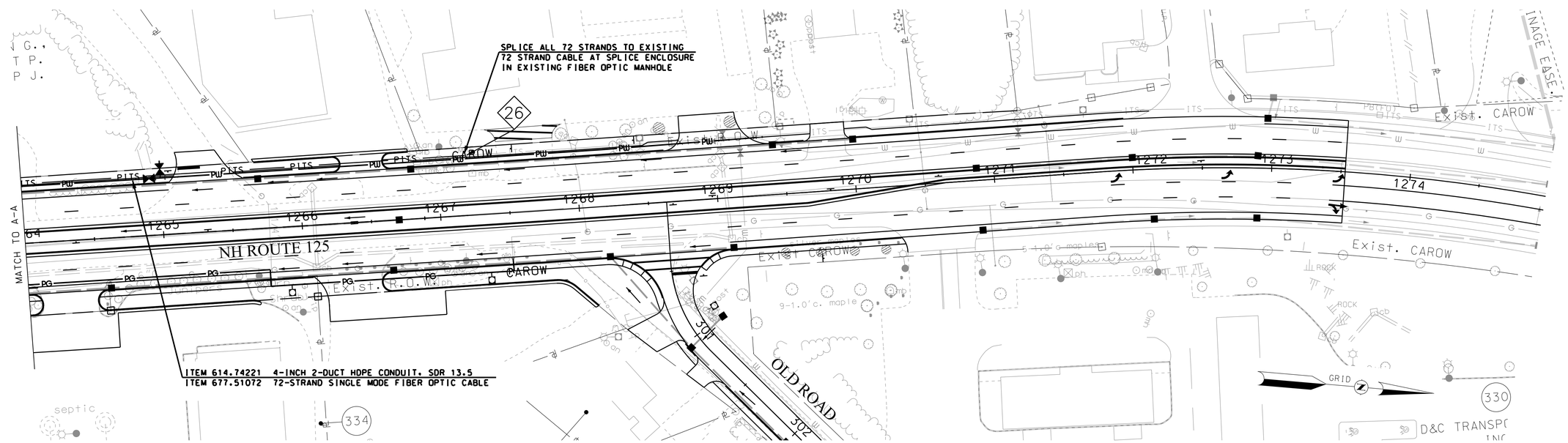
STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

VHB Vanasse Hangen Brustlin, Inc.

INTERCONNECT PLAN

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GINT1	10044G	74	179





ITEM 616.151

SCALE IN FEET: 40 0 40 80

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

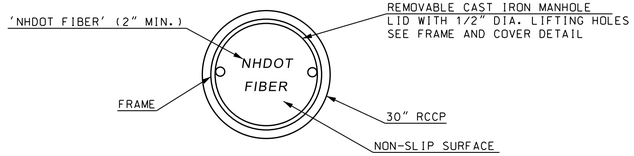
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

INTERCONNECT PLAN

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GINT2	10044G	75	179

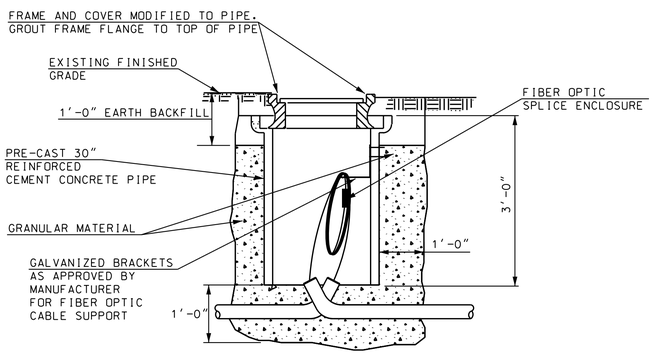
REVISIONS AFTER PROPOSAL			
DESCRIPTION	STATION	DATE	NUMBER

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



MANHOLE COVER

NOT TO SCALE

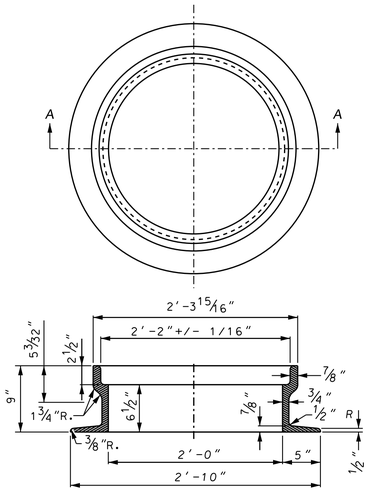


30-INCH FIBER OPTIC MANHOLE

NOT TO SCALE

NOTES:

1. CONDUIT BENDS THAT ARE GREATER THAN THE MINIMUM BENDING RADIUS OF THE CABLE SHALL BE USED TO ENTER THE MANHOLE.
2. CONDUIT SHALL EXTEND INTO THE MANHOLE A MAXIMUM OF 12".
3. SLACK CABLE SHOULD BE SUSPENDED FROM GALVANIZED BRACKETS AS APPROVED BY THE CABLE MANUFACTURER SO AS NOT TO EXCEED THE MINIMUM BENDING RADIUS OF THE CABLE.
4. THE COVER SHALL BE CAST IRON WITH A NON-SLIP SURFACE. THE SURFACE SHALL HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.50.



SECTION A-A

FRAME AND COVER DETAIL
FIBER OPTIC MANHOLE

NOT TO SCALE

GENERAL NOTES:

1. FIBERS INDICATED AS THROUGH FIBERS SHALL NOT BE CUT.
2. AT LOCATIONS WHERE TWO FIBER OPTIC CABLES MUST BE JOINED, ALL FIBER CONNECTIONS SHALL BE FUSION SPLICES CONTAINED IN A SPLICE ENCLOSURE OF SUFFICIENT SIZE TO HOLD ALL THE SPLICES.
3. SPLICE ENCLOSURES SHALL HAVE 36-SPLICE CAPACITY MINIMUM. AT LOCATIONS REQUIRING MORE THAN 36 SPLICES, THE SPLICE ENCLOSURE SHALL HAVE A CAPACITY SUFFICIENT TO HOLD ALL OF THE REQUIRED SPLICES, IN A MULTIPLE OF 12.
4. CONTRACTOR SHALL MAKE ALL REQUIRED CONNECTIONS FOR ALL ANCILLARY TRAFFIC SIGNAL EQUIPMENT INTERFACING WITH THE TRAFFIC SIGNAL CONTROLLER PER NEMA TS2, TYPE 1 TYPICAL DETAIL.
5. MANUFACTURED PIGTAILS SHALL BE TERMINATED ON PATCH PANELS. PATCH CORDS SHALL BE USED TO CONNECT TO ETHERNET FIBER SWITCHES.
6. AT FIBER OPTIC CABLE TERMINAL ENDS WHERE IT IS UNLIKELY THAT THE TRAFFIC SIGNAL SYSTEM WOULD BE EXPANDED BEYOND THE TERMINAL INTERSECTION, THE SPLICE ENCLOSURE MAY BE OMITTED AND THE CABLE MAY BE TERMINATED AT THE PATCH PANEL IN THE TRAFFIC SIGNAL CABINET.
7. CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF EXISTING FIBERS NOT INDICATED FOR USE AT A PROJECT SITE. CONTRACTOR SHALL AVOID INTERRUPTING EXISTING FIBER OPTIC COMMUNICATIONS WHEN SPLICING FIBER OPTIC CABLE FOR NEW CONNECTIONS. IF INTERRUPTION OF EXISTING COMMUNICATIONS IS NECESSARY, CONTRACTOR SHALL CONTACT THE TRANSPORTATION MANAGEMENT CENTER (603-271-6862) AT LEAST 24 HOURS PRIOR TO INTERRUPTION.

FIBER OPTIC CABLE NOTES:

1. MANUFACTURED CONDUIT BEND RADIUS SHALL EXCEED THE MINIMUM BENDING RADIUS FOR FIBER OPTIC CABLE. FIELD BENDING CONDUIT SHALL NOT BE PERMITTED.
2. FIBER OPTIC CABLE SHALL EXCEED THE MINIMUM BENDING RADIUS FOR THE CABLE AT ALL TIMES DURING INSTALLATION, MODIFICATION, REPAIR, SPLICING, OR IN PERMANENT CONDITION. MINIMUM BENDING RADIUS SHALL BE THE GREATER OF THE MANUFACTURER'S RECOMMENDED RADIUS OR 15X THE OUTSIDE DIAMETER OF THE CABLE.
3. SPACING OF PULL BOXES FOR FIBER OPTIC CABLE SHALL NOT EXCEED:
   a) 360 DEGREES OF CONDUIT BENDS;
   b) DISTANCE THAT WOULD EXCEED 600-LB PULLING TENSION; OR
   c) 750 LINEAR FEET.
4. CONTRACTOR SHALL USE ONLY MANUFACTURER-RECOMMENDED GRIPPING AND PULLING DEVICES FOR PULLING CABLES THROUGH THE CONDUIT SYSTEM.
5. FOR UNDERGROUND INSTALLATIONS, FIBER OPTIC SPLICE ENCLOSURES SHALL BE INSTALLED IN EQUIPMENT CABINETS OR IN FIBER OPTIC MANHOLES. FOR AERIAL ATTACHMENTS, FIBER OPTIC SPLICE ENCLOSURES SHALL BE ATTACHED TO THE MESSENGER WIRE.
6. A MINIMUM OF 50 FEET OF SPARE CABLE SHALL BE PROVIDED ON EACH SIDE OF ANY SPLICE ENCLOSURE IN EACH FIBER OPTIC MANHOLE. A MINIMUM OF 75 FEET OF SPARE CABLE SHALL BE PROVIDED ON EACH SIDE OF ANY AERIAL SPLICE ENCLOSURE. AN ADDITIONAL 10 FEET ON EACH SIDE OF THE SPLICE ENCLOSURE SHALL BE PROVIDED FOR EVERY 10 LATERAL FEET FROM THE SPLICE ENCLOSURE LOCATION TO A VEHICLE-ACCESSIBLE LOCATION.
7. UNDERGROUND FIBER OPTIC CABLE SHALL BE INSTALLED IN RACEWAYS IN ACCORDANCE WITH NEC. DIRECT BURIAL OF FIBER OPTIC CABLE SHALL NOT BE PERMITTED.
8. SEE TYPICAL DETAIL SL-1 FOR CONDUIT TRENCH DETAILS.
9. AT AERIAL FIBER OPTIC CABLE INSTALLATIONS, THE FIBER OPTIC CABLE SHALL BE TAGGED AT THE ATTACHMENT LOCATION ON EACH POLE TO WHICH THE CABLE IS ATTACHED. THE TAG SHALL INDICATE THE CABLE OWNER (NHDOT), CONTACT TELEPHONE NUMBER, AND NUMBER OF FIBERS IN THE CABLE.
10. IN THE EVENT THE MATERIAL MANUFACTURER'S INSTALLATION REQUIREMENTS RECOMMEND MORE STRINGENT INSTALLATION PROCEDURES, THE MORE STRINGENT RECOMMENDATIONS AND PROCEDURES SHALL APPLY UNLESS OTHERWISE APPROVED BY THE ENGINEER.

FIBER OPTIC PULL BOXES AND MANHOLES:

1. FIBER OPTIC PULL BOXES AND MANHOLES SHALL BE EXCAVATED TO A DEPTH OF 12 INCHES BELOW THE STRUCTURE'S BOTTOM. THE CONTRACTOR SHALL INSTALL 12 INCHES OF GRANULAR FILL MATERIAL AT THE BASE OF THE EXCAVATION BEFORE INSTALLING THE PULL BOX OR MANHOLE.
2. FIBER OPTIC PULL BOXES AND MANHOLES SHALL NOT BE INSTALLED IN EXISTING OR PROPOSED ROADWAY PAVEMENT. INSTALLATION OF PULL BOXES IN SIDEWALK MAY BE PERMITTED EXCEPT WHERE PROHIBITED BY ADA REGULATIONS.
3. FIBER OPTIC PULL BOXES AND MANHOLES SHALL BE MOUNTED FLUSH TO GRADE.
4. FIBER OPTIC PULL BOXES AND MANHOLES SHALL NOT BE INSTALLED ON STEEP SLOPES WHERE THE COVER CANNOT BE LEVELED WITHIN A TOLERANCE OF 1 INCH PER 1 FOOT OF GRADE.
5. THE MAXIMUM OPENING SIZE FOR FIBER OPTIC PULL BOXES AND MANHOLES SHALL EXCEED 1.5 TIMES THE MINIMUM BENDING RADIUS OF THE FIBER OPTIC CABLE TO BE INSTALLED.

ITEM 614.5183
30-INCH FIBER
OPTIC MANHOLE

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

FIBER OPTIC DETAILS
DETAIL FO-1

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GF01	10044G	76	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
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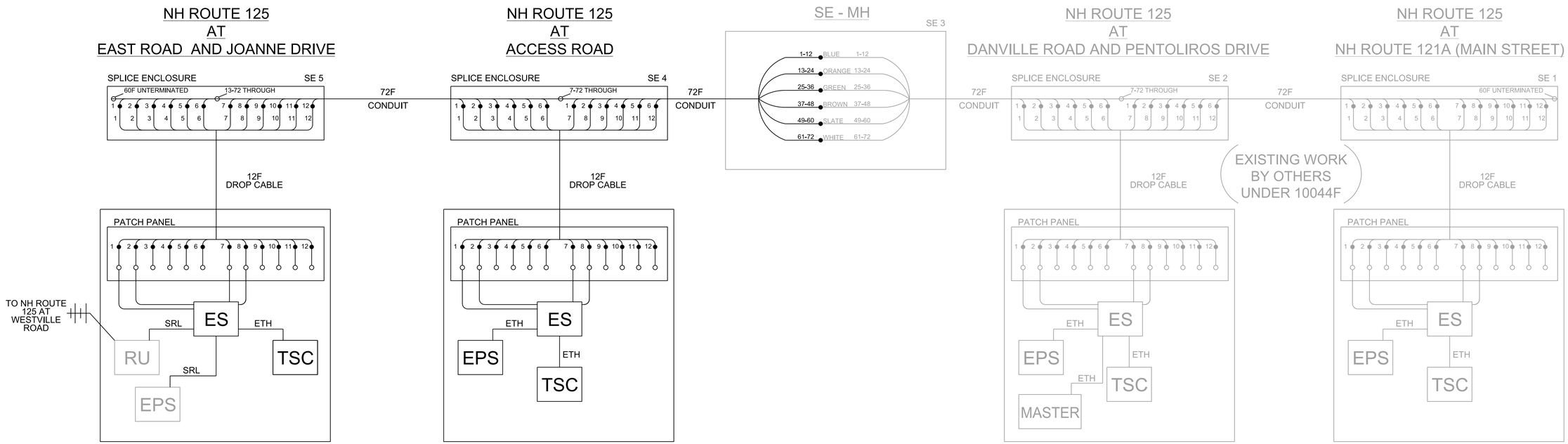


FIBER OPTIC SPLICE TABLE
NH ROUTE 125 AND EAST ROAD / JOANNE DRIVE

	CABLE	STRAND	CONNECTION TYPE	CABLE	STRAND	DESCRIPTION
EAST RD / JOANNE DR SPLICE ENCLOSURE 5	72F TO SE 4	1	SPLICE	12F TO CONTROLLER CABINET	1	SPLICE TO 12F DROP CABLE
	72F TO SE 4	2	SPLICE	12F TO CONTROLLER CABINET	2	SPLICE TO 12F DROP CABLE
	72F TO SE 4	3	SPLICE	12F TO CONTROLLER CABINET	3	SPLICE TO 12F DROP CABLE
	72F TO SE 4	4	SPLICE	12F TO CONTROLLER CABINET	4	SPLICE TO 12F DROP CABLE
	72F TO SE 4	5	SPLICE	12F TO CONTROLLER CABINET	5	SPLICE TO 12F DROP CABLE
	72F TO SE 4	6	SPLICE	12F TO CONTROLLER CABINET	6	SPLICE TO 12F DROP CABLE
	72F TO SE 4	7	SPLICE	12F TO CONTROLLER CABINET	7	SPLICE TO 12F DROP CABLE
	72F TO SE 4	8	SPLICE	12F TO CONTROLLER CABINET	8	SPLICE TO 12F DROP CABLE
	72F TO SE 4	9	SPLICE	12F TO CONTROLLER CABINET	9	SPLICE TO 12F DROP CABLE
	72F TO SE 4	10	SPLICE	12F TO CONTROLLER CABINET	10	SPLICE TO 12F DROP CABLE
	72F TO SE 4	11	SPLICE	12F TO CONTROLLER CABINET	11	SPLICE TO 12F DROP CABLE
	72F TO SE 4	12	SPLICE	12F TO CONTROLLER CABINET	12	SPLICE TO 12F DROP CABLE
	72F TO SE 4	13-72	UNTERMINATED	-	-	END OF CABLE
PATCH PANEL AT CONTROLLER CABINET (EAST RD / JOANNE DR)	12F TO SE 5	1	SPLICE	PIGTAIL	-	ES, PP POSITION 1
	12F TO SE 5	2	SPLICE	PIGTAIL	-	ES, PP POSITION 2
	12F TO SE 5	3	SPLICE	PIGTAIL	-	SPARE, PP POSITION 3
	12F TO SE 5	4	SPLICE	PIGTAIL	-	SPARE, PP POSITION 4
	12F TO SE 5	5	SPLICE	PIGTAIL	-	SPARE, PP POSITION 5
	12F TO SE 5	6	SPLICE	PIGTAIL	-	SPARE, PP POSITION 6
	12F TO SE 5	7	SPLICE	PIGTAIL	-	ES, PP POSITION 7
	12F TO SE 5	8	SPLICE	PIGTAIL	-	ES, PP POSITION 8
	12F TO SE 5	9	SPLICE	PIGTAIL	-	SPARE, PP POSITION 9
	12F TO SE 5	10	SPLICE	PIGTAIL	-	SPARE, PP POSITION 10
	12F TO SE 5	11	SPLICE	PIGTAIL	-	SPARE, PP POSITION 11
	12F TO SE 5	12	SPLICE	PIGTAIL	-	SPARE, PP POSITION 12

FIBER OPTIC SPLICE TABLE
NH ROUTE 125 AND ACCESS ROAD

	CABLE	STRAND	CONNECTION TYPE	CABLE	STRAND	DESCRIPTION
ACCESS ROAD SPLICE ENCLOSURE 4	72F TO SE 5	1	SPLICE	12F TO CONTROLLER CABINET	1	SPLICE TO 12F DROP CABLE
	72F TO SE 5	2	SPLICE	12F TO CONTROLLER CABINET	2	SPLICE TO 12F DROP CABLE
	72F TO SE 5	3	SPLICE	12F TO CONTROLLER CABINET	3	SPLICE TO 12F DROP CABLE
	72F TO SE 5	4	SPLICE	12F TO CONTROLLER CABINET	4	SPLICE TO 12F DROP CABLE
	72F TO SE 5	5	SPLICE	12F TO CONTROLLER CABINET	5	SPLICE TO 12F DROP CABLE
	72F TO SE 5	6	SPLICE	12F TO CONTROLLER CABINET	6	SPLICE TO 12F DROP CABLE
	72F TO SE 5	7-72	THROUGH	12F TO CONTROLLER CABINET	7-72	72F NH ROUTE 125 BACKBONE
	72F TO SE MH	1	SPLICE	12F TO CONTROLLER CABINET	7	SPLICE TO 12F DROP CABLE
	72F TO SE MH	2	SPLICE	12F TO CONTROLLER CABINET	8	SPLICE TO 12F DROP CABLE
	72F TO SE MH	3	SPLICE	12F TO CONTROLLER CABINET	9	SPLICE TO 12F DROP CABLE
	72F TO SE MH	4	SPLICE	12F TO CONTROLLER CABINET	10	SPLICE TO 12F DROP CABLE
	72F TO SE MH	5	SPLICE	12F TO CONTROLLER CABINET	11	SPLICE TO 12F DROP CABLE
	72F TO SE MH	6	SPLICE	12F TO CONTROLLER CABINET	12	SPLICE TO 12F DROP CABLE
PATCH PANEL AT CONTROLLER CABINET (ACCESS ROAD)	12F TO SE 4	1	SPLICE	PIGTAIL	-	ES, PP POSITION 1
	12F TO SE 4	2	SPLICE	PIGTAIL	-	ES, PP POSITION 2
	12F TO SE 4	3	SPLICE	PIGTAIL	-	SPARE, PP POSITION 3
	12F TO SE 4	4	SPLICE	PIGTAIL	-	SPARE, PP POSITION 4
	12F TO SE 4	5	SPLICE	PIGTAIL	-	SPARE, PP POSITION 5
	12F TO SE 4	6	SPLICE	PIGTAIL	-	SPARE, PP POSITION 6
	12F TO SE 4	7	SPLICE	PIGTAIL	-	ES, PP POSITION 7
	12F TO SE 4	8	SPLICE	PIGTAIL	-	ES, PP POSITION 8
	12F TO SE 4	9	SPLICE	PIGTAIL	-	SPARE, PP POSITION 9
	12F TO SE 4	10	SPLICE	PIGTAIL	-	SPARE, PP POSITION 10
	12F TO SE 4	11	SPLICE	PIGTAIL	-	SPARE, PP POSITION 11
	12F TO SE 4	12	SPLICE	PIGTAIL	-	SPARE, PP POSITION 12

LEGEND

•—○	FIBER OPTIC PIGTAIL
—•—	FIBER OPTIC SPLICE
ES -	ETHERNET SWITCH
TSC -	TRAFFIC SIGNAL CONTROLLER
ETH -	ETHERNET CABLE
EPS -	EMERGENCY PREEMPTION SYSTEM
RU -	RADIO UNIT
SE -	SPLICE ENCLOSURE
PP -	PATCH PANEL
MASTER -	MASTER SIGNAL CONTROLLER
SRL -	SERIAL TO ETHERNET CABLE

FIBER OPTIC SPLICE TABLE
NH ROUTE 125 AT MANHOLE SPLICE ENCLOSURE

	CABLE	STRAND	CONNECTION TYPE	CABLE	STRAND	CONNECTION TYPE	DESCRIPTION
NH ROUTE 125 MAN HOLE SPLICE ENCLOSURE 4	72F TO SE 4	1-12	SPLICE	72F TO SE 2	1-12	SPLICE	SPLICE TO 72F BACKBONE
	72F TO SE 4	13-24	SPLICE	72F TO SE 2	13-24	SPLICE	SPLICE TO 72F BACKBONE
	72F TO SE 4	25-36	SPLICE	72F TO SE 2	25-36	SPLICE	SPLICE TO 72F BACKBONE
	72F TO SE 4	37-48	SPLICE	72F TO SE 2	37-48	SPLICE	SPLICE TO 72F BACKBONE
	72F TO SE 4	49-60	SPLICE	72F TO SE 2	49-60	SPLICE	SPLICE TO 72F BACKBONE
	72F TO SE 4	61-72	SPLICE	72F TO SE 2	61-72	SPLICE	SPLICE TO 72F BACKBONE

ITEM 616.151

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

VHB Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

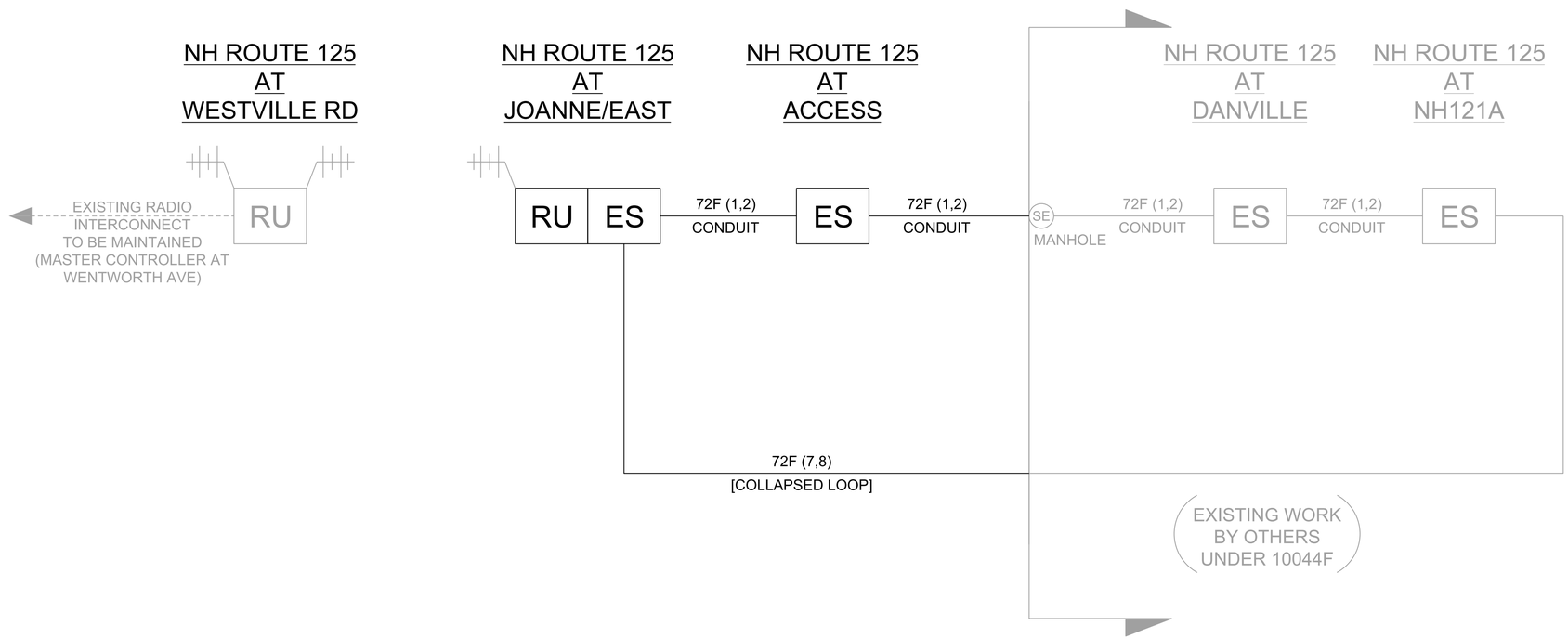
STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

SYSTEM ARCHITECTURE PLAN

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GFIB	10044G	77	179

NETWORK PLAN



LEGEND	
ES -	ETHERNET SWITCH
RU -	RADIO UNIT
SE -	SPLICE ENCLOSURE

ITEM 616.151

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

NETWORK PLAN

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GNET	10044G	78	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

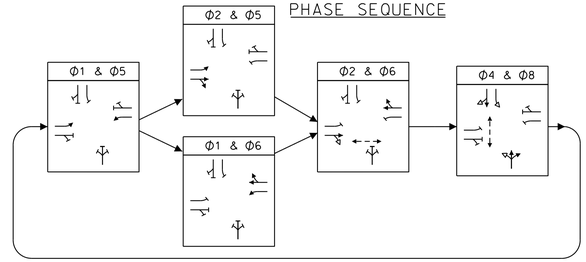
SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

SIGNAL HEAD DATA

EXISTING		TEMPORARY		
P2,P3	4	1,5	2,6,8	P1,P4
16" x 18" LED HOUSING	12" LENS	12" LENS	12" LENS	16" x 18" LED HOUSING
	WITH 5" LOUVERED BACKPLATES			

- ALL SIGNAL HEADS SHALL BE EQUIPPED WITH L.E.D. MODULES -

TEMPORARY PHASE SEQUENCE

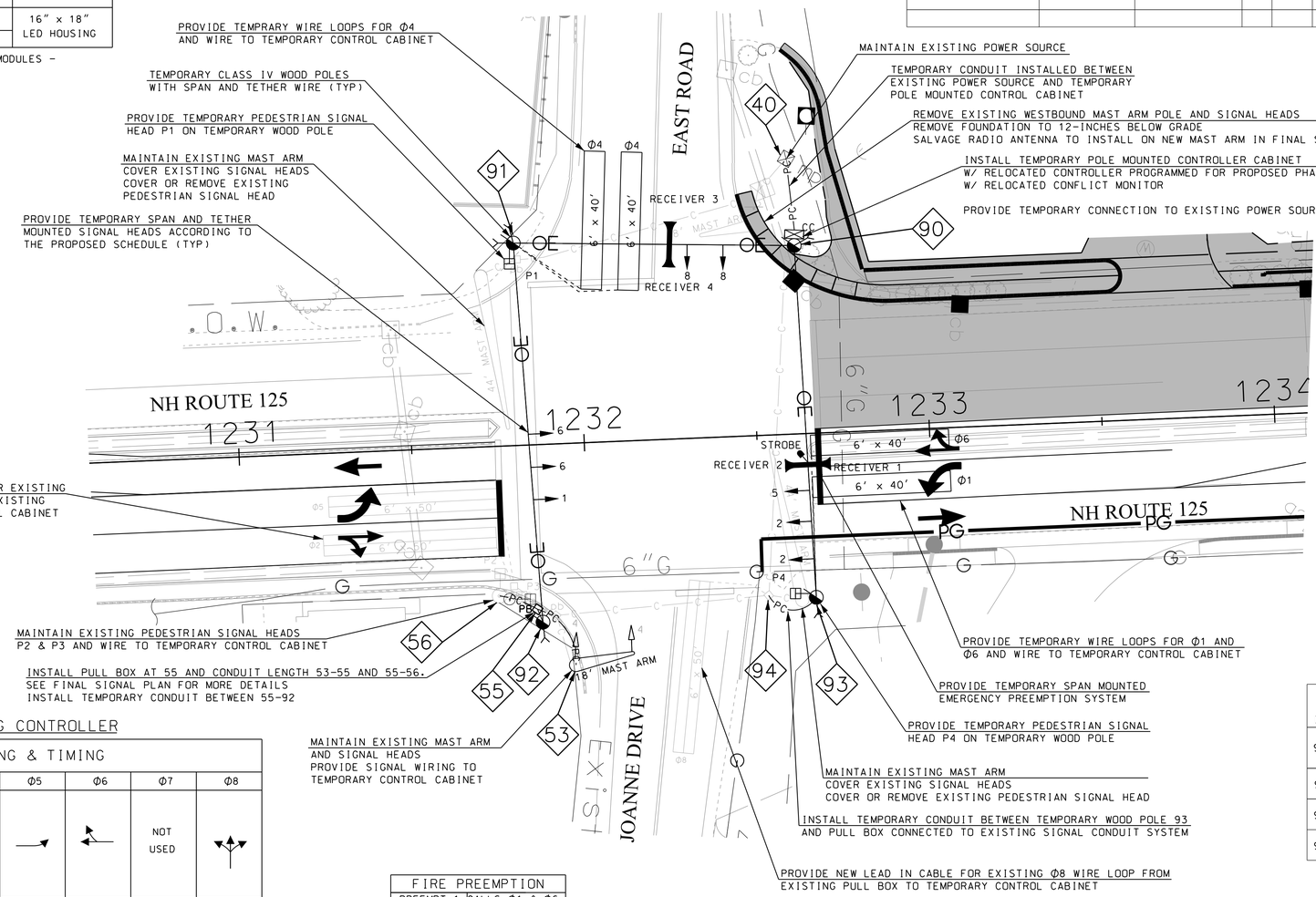


DETECTOR SCHEDULE

DETECTOR				AMPLIFIER		INDUCT UH	RESISTANCE OF LOOPS	RESIST. LOOP GRD. MEG.	RESIST. SHIELD GRD. MEG.
STREET	DIRECTION	LANE	Φ	NO.	CHANNEL				
NH ROUTE 125	NORTHBOUND	LEFT	5	1	1				
NH ROUTE 125	NORTHBOUND	THRU-RIGHT	2	2	1				
NH ROUTE 125	SOUTHBOUND	LEFT	1	3	1				
NH ROUTE 125	SOUTHBOUND	THRU-RIGHT	6	4	1				
EAST ROAD	EASTBOUND	LEFT	4	5	1				
EAST ROAD	EASTBOUND	THRU-RIGHT	4	5	1				
JOANNE DRIVE	WESTBOUND	LEFT-THRU-RIGHT	8	6	1				
						RECORD FIELD MEASUREMENTS HERE			

2016 SYSTEM DESIGN VOLUMES AM(PM)[SAT]

265(220)[290]
10(10)[15]
70(80)[75]
55(60)[50]
1010(800)[1030]
55(50)[60]
[285](405)160
[1030](1170)425
[5](5)0
[25](25)5
[15](15)0
[25](20)0



CONSTRUCTION NOTES:

1. THE EXISTING WESTBOUND MAST ARM WITH Φ8 SIGNAL EQUIPMENT SHALL BE REMOVED AND THE EQUIPMENT SALVAGED. THE FOUNDATION SHALL ALSO BE REMOVED.
2. THE EXISTING EASTBOUND MAST ARM WITH Φ4 SIGNAL EQUIPMENT SHALL BE MAINTAINED IN PLACE AND BE TIED INTO THE TEMPORARY SIGNAL TO MAINTAIN OPERATIONS.
3. THE NORTHBOUND AND SOUTHBOUND MAST ARMS FOR NH 125 SHALL BE MAINTAINED IN THEIR EXISTING LOCATIONS. ALL SIGNAL EQUIPMENT ON THE MAST ARMS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC DURING THE OPERATION OF THE TEMPORARY SIGNAL SYSTEM.
4. INSTALL TEMPORARY SPAN WIRE SIGNAL SYSTEM WITH SPAN MOUNTED SIGNAL HEADS FOR THE NORTHBOUND, SOUTHBOUND AND WESTBOUND DIRECTIONS.
5. COORDINATION BETWEEN WESTVILLE ROAD AND EAST RD/JOANNE DR WILL BE SUSPENDED DURING CONSTRUCTION

ID	STATION	OFFSET TO FACE LT.	OFFSET TO FACE RT.	REMARKS
90	1232+63	54'		50' CLASS IV WOOD POLE W/ SCREW ANCHOR BACK TIES W/ TEMPORARY POLE MOUNTED CONTROL CABINET
91	1231+82	59'		50' CLASS IV WOOD POLE W/ SCREW ANCHOR BACK TIES
92	1231+86		51'	50' CLASS IV WOOD POLE W/ SCREW ANCHOR BACK TIES
93	1232+65		47'	50' CLASS IV WOOD POLE W/ SCREW ANCHOR BACK TIES

EXISTING NEMA DUAL RING CONTROLLER

TEMPORARY SIGNAL PHASING & TIMING

	Φ1	Φ2	Φ3	Φ4	Φ5	Φ6	Φ7	Φ8
			NOT USED				NOT USED	
INITIAL INTERVAL	5	7	-	5	7	7	-	5
VEHICLE EXTENSION	4	4	-	4	4	4	-	4
MAXIMUM 1	20	60	-	30	30	60	-	30
MAXIMUM 2	-	-	-	-	-	-	-	-
YELLOW	4.0	4.0	-	4.0	4.0	4.0	-	4.0
ALL RED	2.0	2.0	-	2.0	2.0	2.0	-	2.0
PEDESTRIAN WALK	-	4	-	4	-	-	-	-
PEDESTRIAN CLEAR	-	18	-	18	-	-	-	-
FLASH	FR	FY	-	FR	FR	FY	-	FR
RECALL	OFF	SOFT	-	OFF	OFF	SOFT	-	OFF
DETECTOR	NL	NL	-	NL	NL	NL	-	NL
PRE-EMPT PRIORITY	1	2	-	3	2	1	-	4

L = LOCKING FY = FLASH YELLOW
NL = NON-LOCKING FR = FLASH RED

FIRE PREEMPTION

PREEMPT 1	CALLS Φ1 & Φ6
PREEMPT 2	CALLS Φ2 & Φ5
PREEMPT 3	CALLS Φ4
PREEMPT 4	CALLS Φ8
EXIT TO Φ2 & Φ6	

FIRE PREEMPTION NOTES:

1. PRE-EMPTION SIGNALS SHALL BE SERVICED ON A FIRST COME, FIRST SERVED BASIS.
2. MINIMUM GREEN AND NORMAL VEHICLE CLEARANCE TIMES SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY PRE-EMPTION DEMAND.
3. THE LOCATION OF TEMPORARY EMERGENCY VEHICLE PRE-EMPTION RECEIVERS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR, THE ENGINEER, AND THE TOWN OF PLAISTOW FIRE DEPARTMENT.

LEGEND

EXISTING	RELOCATED	PROPOSED	REMARKS
			OVERHEAD SIGN
			TEMPORARY WOOD POLE WITH BACK GUY
		6' x 40'	WIRE LOOP DETECTOR

20 0 20 40
SCALE IN FEET

ITEM 616.161

Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

PHASE 1
TEMPORARY SIGNAL PLAN
NH125 AND EAST RD/JOANNE DR

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GTSIG1	10044G	79	179

REVISIONS AFTER PROPOSAL

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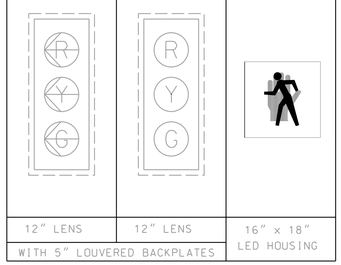
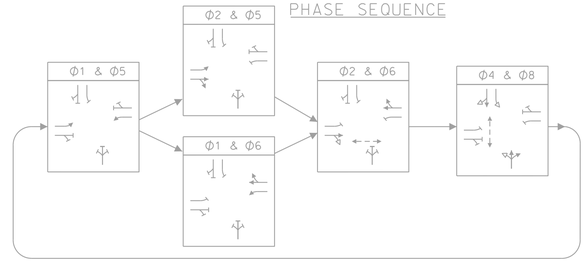
SIGNAL HEAD DATA

EXISTING		
1.5	2.4.6.8	P1-P4
		
12" LENS	12" LENS	16" x 18" LED HOUSING
WITH 5" LOUVERED BACKPLATES		

- ALL SIGNAL HEADS SHALL BE EQUIPPED WITH L.E.D. MODULES -

TEMPORARY PHASE SEQUENCE



DETECTOR SCHEDULE

DETECTOR				AMPLIFIER		INDUCT UH	RESISTANCE OF LOOPS	RESIST. LOOP GRD. MEG.	RESIST. SHIELD GRD. MEG.
STREET	DIRECTION	LANE	Φ	NO.	CHANNEL				
NH ROUTE 125	NORTHBOUND	LEFT	5	1	1				
NH ROUTE 125	NORTHBOUND	THRU-RIGHT	2	2	1				
NH ROUTE 125	SOUTHBOUND	LEFT	1	3	1				
NH ROUTE 125	SOUTHBOUND	THRU-RIGHT	6	4	1				
EAST ROAD	EASTBOUND	LEFT	4	5	1				
EAST ROAD	EASTBOUND	THRU-RIGHT	4	5	1				
JOANNE DRIVE	WESTBOUND	LEFT-THRU-RIGHT	8	6	1				
						RECORD FIELD MEASUREMENTS HERE			

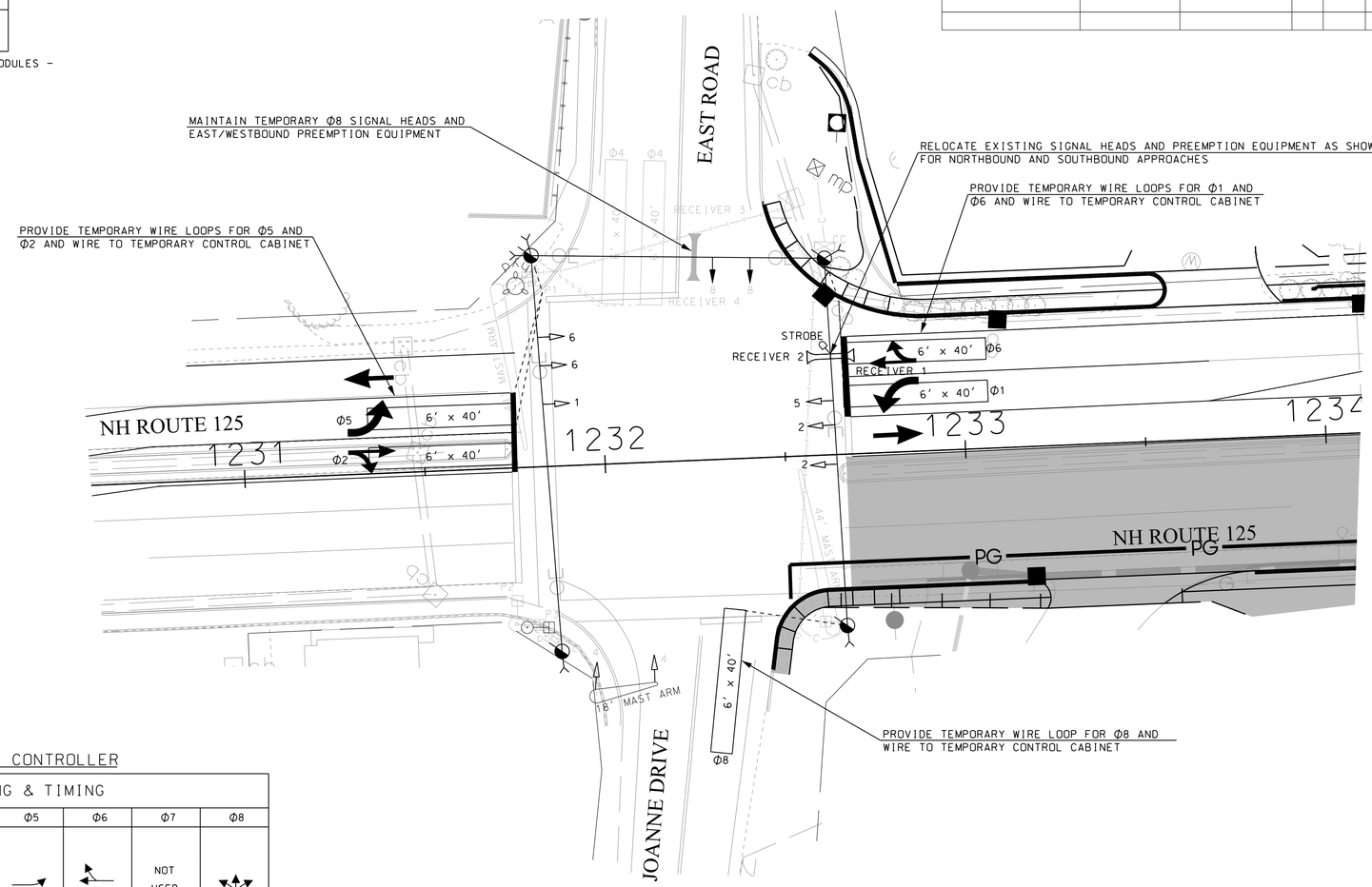
2016 SYSTEM DESIGN VOLUMES AM(PM)[SAT]

265(220)[290]
10(10)[15]
70(80)[75]

55(60)[50]
1010(800)[1030]
55(50)[60]

[285](405)160
[1030](1170)425
[5](5)0

[25](25)5
[15](15)0
[25](20)0



CONSTRUCTION NOTES:

1. MAINTAIN TEMPORARY SIGNAL SYSTEM INSTALLED IN PHASE 1.
2. RELOCATE SIGNAL HEADS AND PREEMPTION EQUIPMENT FOR NH125 ALONG TEMPORARY SPAN WIRE.
3. INSTALL TEMPORARY WIRE LOOPS FOR NH125 AND JOANNE DR. APPROACHES.

EXISTING NEMA DUAL RING CONTROLLER

TEMPORARY SIGNAL PHASING & TIMING

	Φ1	Φ2	Φ3	Φ4	Φ5	Φ6	Φ7	Φ8
			NOT USED				NOT USED	
INITIAL INTERVAL	5	7	-	5	7	7	-	5
VEHICLE EXTENSION	4	4	-	4	4	4	-	4
MAXIMUM 1	20	60	-	30	30	60	-	30
MAXIMUM 2	-	-	-	-	-	-	-	-
YELLOW	4.0	4.0	-	4.0	4.0	4.0	-	4.0
ALL RED	2.0	2.0	-	2.0	2.0	2.0	-	2.0
PEDESTRIAN WALK	-	4	-	4	-	-	-	-
PEDESTRIAN CLEAR	-	18	-	24	-	-	-	-
FLASH	FR	FY	-	FR	FR	FY	-	FR
RECALL	OFF	SOFT	-	OFF	OFF	SOFT	-	OFF
DETECTOR	NL	NL	-	NL	NL	NL	-	NL
PRE-EMPT PRIORITY	1	2	-	3	2	1	-	4

L = LOCKING FY = FLASH YELLOW
NL = NON-LOCKING FR = FLASH RED

FIRE PREEMPTION

PREEMPT 1	CALLS Φ1 & Φ6
PREEMPT 2	CALLS Φ2 & Φ5
PREEMPT 3	CALLS Φ4
PREEMPT 4	CALLS Φ8
EXIT TO Φ2 & Φ6	

FIRE PREEMPTION NOTES:

1. PRE-EMPTION SIGNALS SHALL BE SERVICED ON A FIRST COME, FIRST SERVED BASIS.
2. MINIMUM GREEN AND NORMAL VEHICLE CLEARANCE TIMES SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY PRE-EMPTION DEMAND.
3. THE LOCATION OF TEMPORARY EMERGENCY VEHICLE PRE-EMPTION RECEIVERS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR, THE ENGINEER, AND THE TOWN OF PLAISTOW FIRE DEPARTMENT.

LEGEND

EXISTING	RELOCATED	PROPOSED	REMARKS
			OVERHEAD SIGN
			TEMPORARY WOOD POLE WITH BACK GUY
6' x 40'		6' x 40'	WIRE LOOP DETECTOR

20 0 20 40
SCALE IN FEET

ITEM 616.161

Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

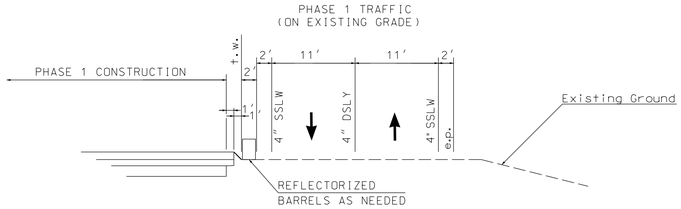
PHASE 2
TEMPORARY SIGNAL PLAN
NH125 AND EAST RD/JOANNE DR

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GTSIG2	10044G	80	179

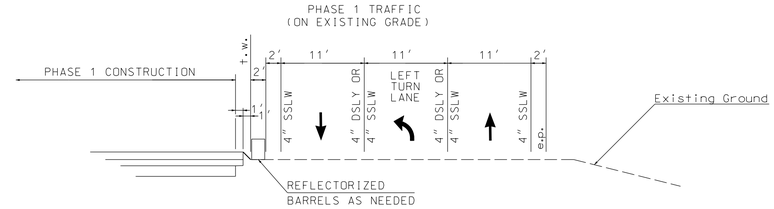
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

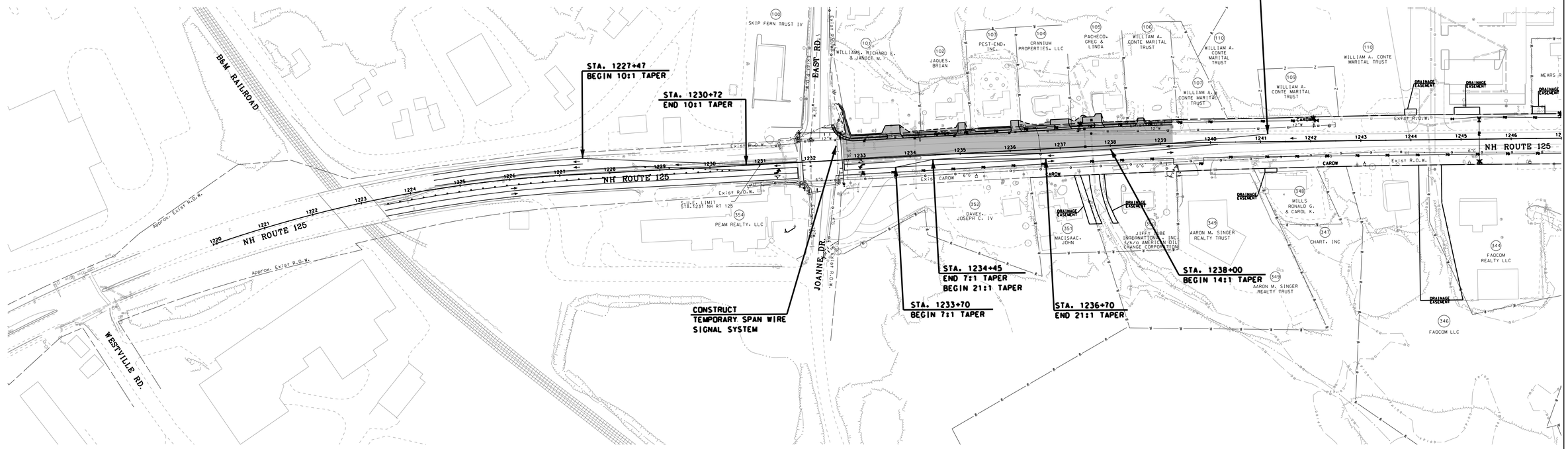
SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	



CONSTRUCTION PHASING TYPICAL
2 LANES
N.T.S.



CONSTRUCTION PHASING TYPICAL
3 LANES AT INTERSECTION
N.T.S.



GENERAL NOTES

- TRAFFIC CONTROL DESIGN SPEED = 35 MPH
- NIGHT WORK MAY BE REQUIRED IN CONSTRICTED AREAS, ESPECIALLY WHERE TWO DAYTIME LANES ARE REQUIRED BUT CANNOT BE ATTAINED BY STANDARD PHASED CONSTRUCTION. SEE REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- ACCESS TO EXISTING DRIVES AND CONNECTING ROADS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE NOTED.
- CONSTRUCTION SIGNING SHALL BE INSTALLED AND MAINTAINED ACCORDING TO NHDOT STANDARDS. EXISTING WARNING, REGULATORY AND GUIDE SIGNS SHALL BE ADJUSTED, RELOCATED, COVERED AND/OR SUPPLEMENTED BY TEMPORARY SIGNS TO ACCOMMODATE THE LANE ARRANGEMENTS AND TRAFFIC CONDITIONS UNDER EVERY PHASE.

PHASE 1

- INSTALL CONSTRUCTION SIGNING PACKAGE AND WARNING DEVICES.
- INSTALL REFLECTORIZED BARRELS AS NEEDED.
- TEMPORARY LANE CLOSURES WILL BE ALLOWED CONSISTENT WITH REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- CONSTRUCT PHASE 1 TEMPORARY TRAFFIC SIGNALS AT EAST ROAD
  - SEE PHASE 1 TEMPORARY SIGNAL PLAN.
- REMOVE APPROXIMATELY 475 LF OF THE EXISTING MEDIAN ISLAND.
  - STA. 1228+55 TO STA. 1231+70
  - STA. 1232+65 TO STA. 1234+25
- CONSTRUCT WESTERLY PORTION OF NH 125 ROADWAY
  - STA. 1232+66 TO STA. 1239+25, LT
  - STA. 1251+00 TO STA. 1255+25, LT
- CONSTRUCT SERVICE ROAD
  - STA. 102+00 TO STA. 119+00
  - CONSTRUCT EMBANKMENT AND BASE COURSE MATERIALS TO THE BOTTOM OF PAVEMENT LEVEL. A 90-DAY WAITING PERIOD IS REQUIRED TO ALLOW FOR SETTLEMENT.
- CONSTRUCT BMP #4
  - CONSTRUCT EMBANKMENT.

LEGEND

- TEMPORARY WIDENING
- TRAFFIC
- CONSTRUCTION AREA
- REFLECTORIZED BARRELS

100 0 100 200
SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

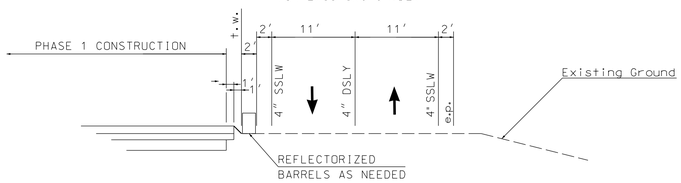
TRAFFIC CONTROL
PHASE 1

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP1	10044G	81	179

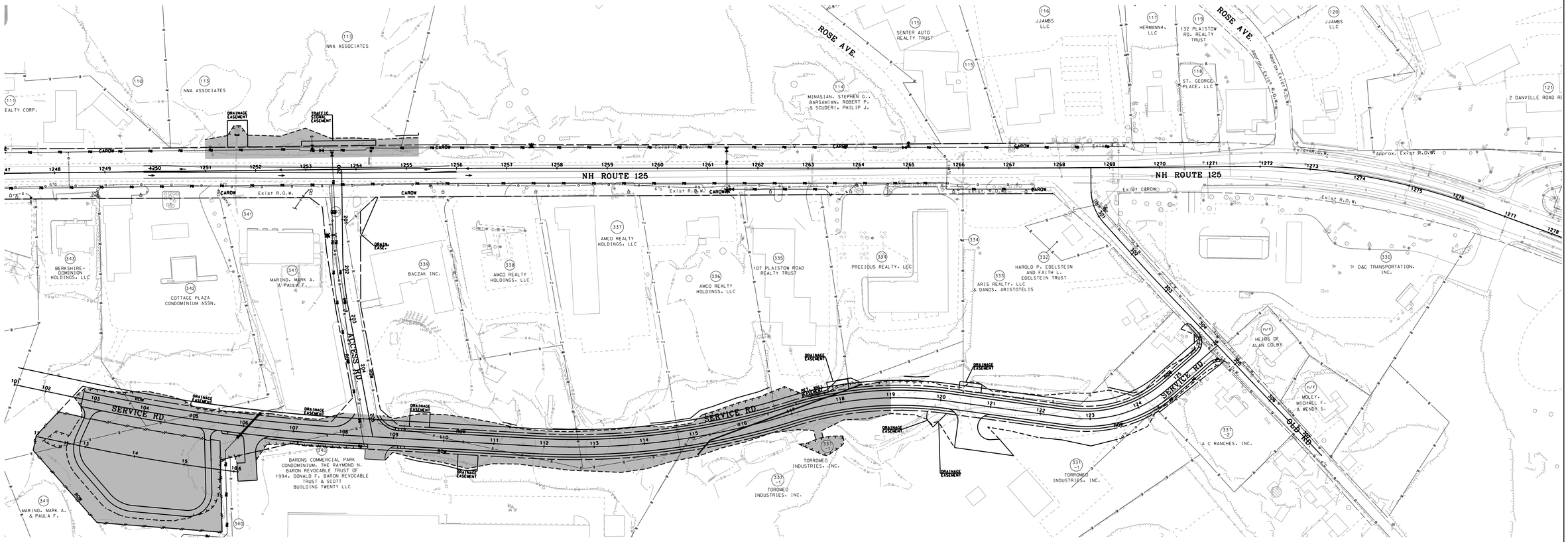
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED VHB TEAM	DATE 7/2009	
NEW DESIGN F. KOCZALKA	DATE 9/2014	
SHEET CHECKED A. GRANDE	DATE 8/2015	
AS BUILT DETAILS	DATE	



CONSTRUCTION PHASING TYPICAL
2 LANES
N.T.S.



REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED VHB TEAM	DATE 7/2009	
NEW DESIGN F. KOCZALKA	DATE 9/2014	
SHEET CHECKED A. GRANDE	DATE 8/2015	
AS BUILT DETAILS	DATE	

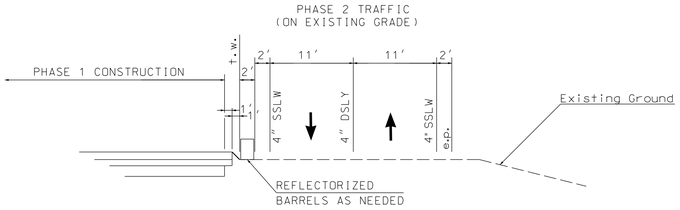
100 0 100 200
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

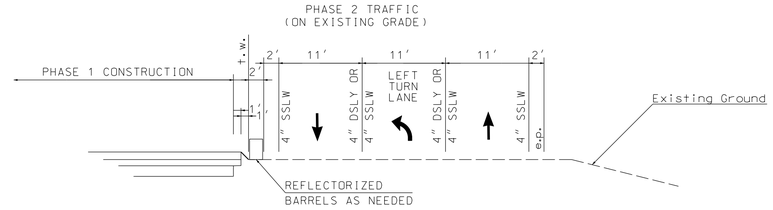
TRAFFIC CONTROL
PHASE 1

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP1	10044G	82	179



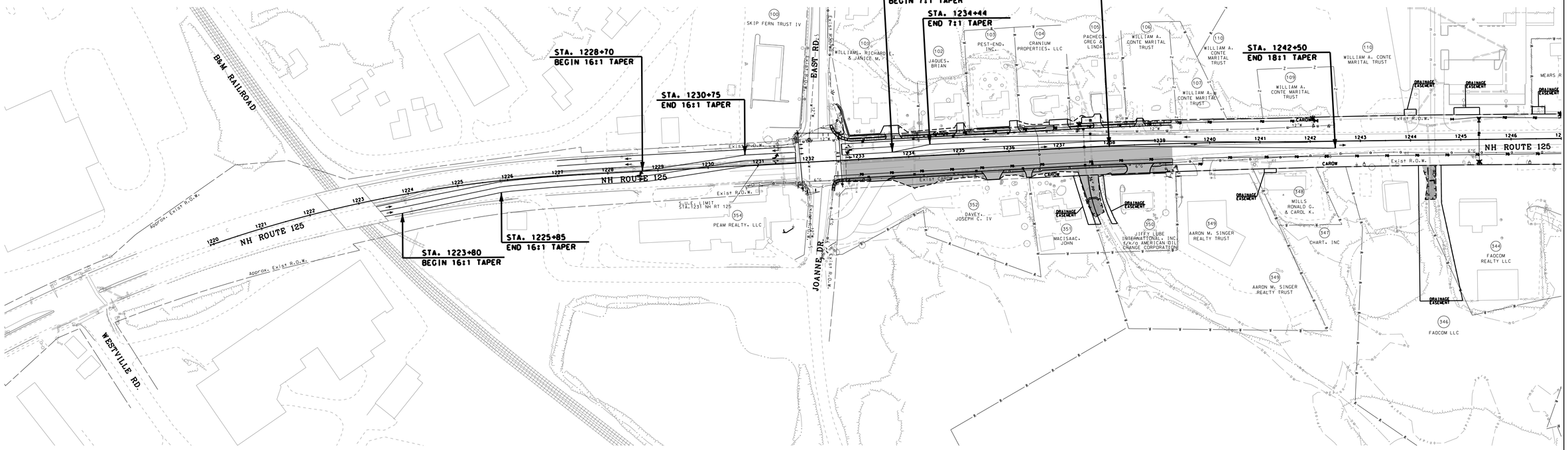
CONSTRUCTION PHASING TYPICAL
2 LANES

N.T.S.



CONSTRUCTION PHASING TYPICAL
3 LANES AT INTERSECTION

N.T.S.



GENERAL NOTES

- TRAFFIC CONTROL DESIGN SPEED = 35 MPH
- NIGHT WORK MAY BE REQUIRED IN CONSTRICTED AREAS, ESPECIALLY WHERE TWO DAYTIME LANES ARE REQUIRED BUT CANNOT BE ATTAINED BY STANDARD PHASED CONSTRUCTION. SEE REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- ACCESS TO EXISTING DRIVES AND CONNECTING ROADS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE NOTED.
- CONSTRUCTION SIGNING SHALL BE INSTALLED AND MAINTAINED ACCORDING TO NHDOT STANDARDS. EXISTING WARNING, REGULATORY AND GUIDE SIGNS SHALL BE ADJUSTED, RELOCATED, COVERED AND/OR SUPPLEMENTED BY TEMPORARY SIGNS TO ACCOMMODATE THE LANE ARRANGEMENTS AND TRAFFIC CONDITIONS UNDER EVERY PHASE.

PHASE 2

- ADJUST CONSTRUCTION SIGNAGE AND WARNING DEVICES.
- INSTALL REFLECTORIZED BARRELS AS NEEDED.
- TEMPORARY LANE CLOSURES WILL BE ALLOWED CONSISTENT WITH REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- MODIFY THE TEMPORARY TRAFFIC SIGNALS AT EAST ROAD ACCORDING TO PHASE 1B LAYOUT.
  - SEE PHASE 2 TEMPORARY SIGNAL PLAN.
- CONSTRUCT EASTERLY PORTION OF NH 125 ROADWAY
  - STA. 1232+66 TO STA. 1239+25, RT
  - STA. 1244+40, RT CONSTRUCT DRAINAGE EXTENSION AND HEADWALL

LEGEND

- TEMPORARY WIDENING
- TRAFFIC
- CONSTRUCTION AREA
- REFLECTORIZED BARRELS

100 0 100 200
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

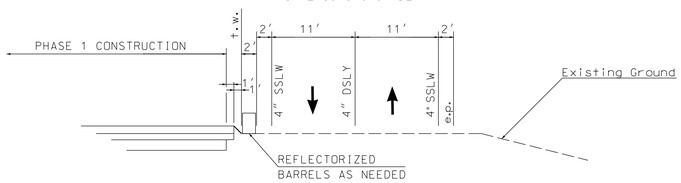
TRAFFIC CONTROL
PHASE 2

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP2	10044G	83	179

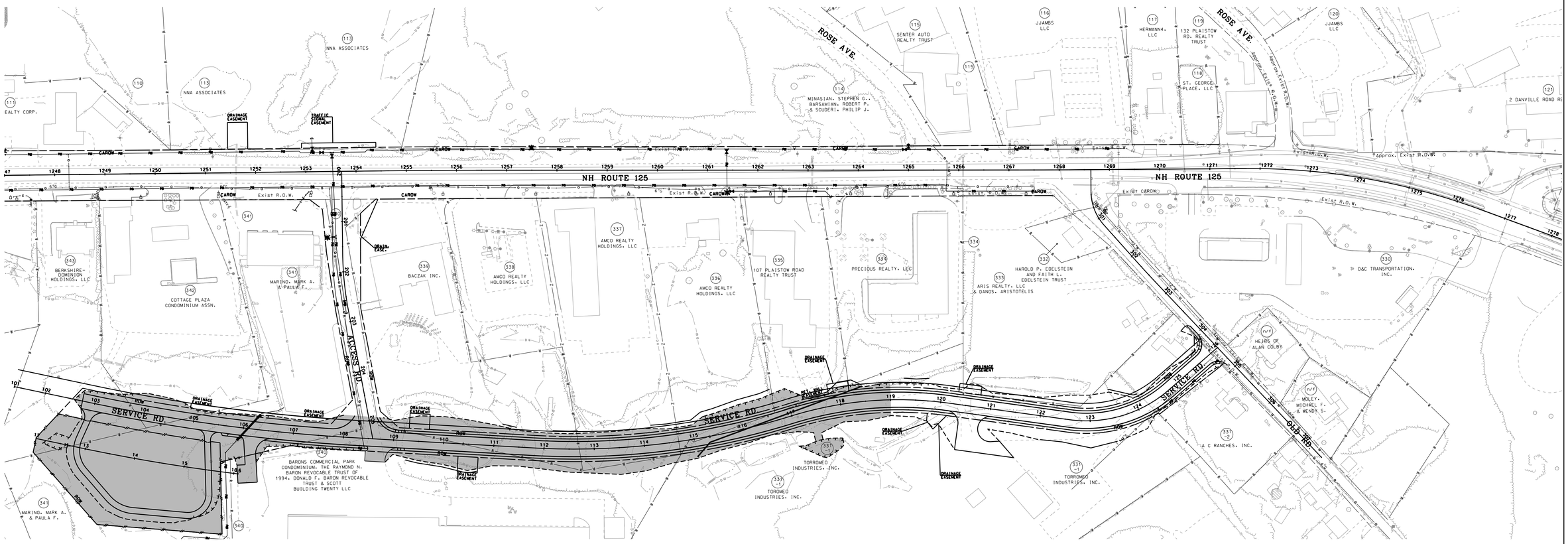
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED VHB TEAM	DATE 7/2009	
NEW DESIGN F. KOCZALKA	DATE 9/2014	
SHEET CHECKED A. GRANDE	DATE 8/2015	
AS BUILT DETAILS	DATE	



CONSTRUCTION PHASING TYPICAL
2 LANES
N.T.S.



REVISIONS AFTER PROPOSAL			
STATION	STATION	DATE	NUMBER	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

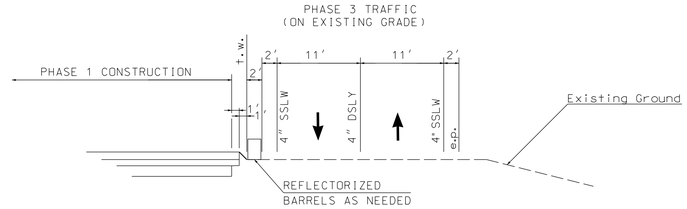
100 0 100 200
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

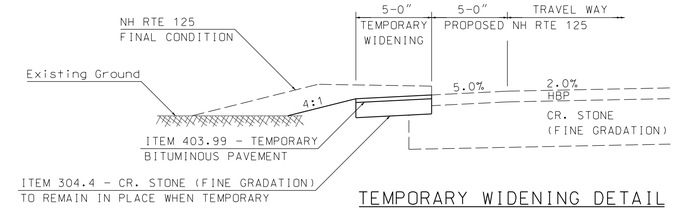
TRAFFIC CONTROL
PHASE 2

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP2	10044G	84	179



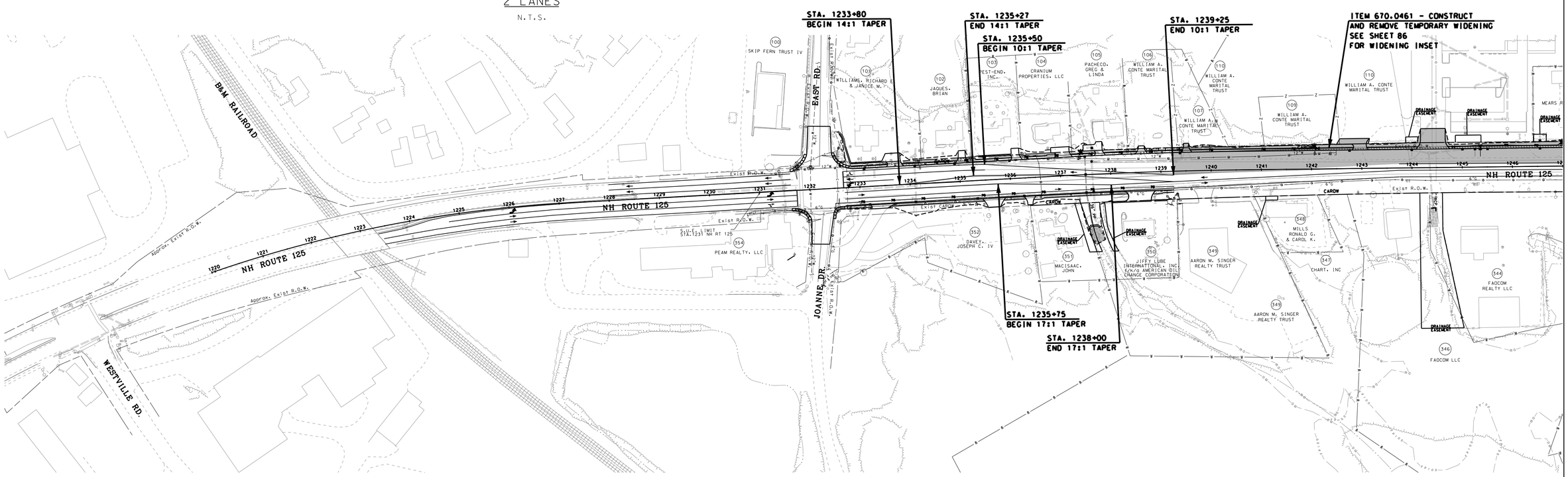
CONSTRUCTION PHASING TYPICAL 2 LANES

N.T.S.



TEMPORARY WIDENING DETAIL

N.T.S.



GENERAL NOTES

- TRAFFIC CONTROL DESIGN SPEED = 35 MPH
- NIGHT WORK MAY BE REQUIRED IN CONSTRICTED AREAS, ESPECIALLY WHERE TWO DAYTIME LANES ARE REQUIRED BUT CANNOT BE ATTAINED BY STANDARD PHASED CONSTRUCTION. SEE REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- ACCESS TO EXISTING DRIVES AND CONNECTING ROADS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE NOTED.
- CONSTRUCTION SIGNING SHALL BE INSTALLED AND MAINTAINED ACCORDING TO NHDOT STANDARDS. EXISTING WARNING, REGULATORY AND GUIDE SIGNS SHALL BE ADJUSTED, RELOCATED, COVERED AND/OR SUPPLEMENTED BY TEMPORARY SIGNS TO ACCOMMODATE THE LANE ARRANGEMENTS AND TRAFFIC CONDITIONS UNDER EVERY PHASE.

PHASE 3

- ADJUST CONSTRUCTION SIGNAGE AND WARNING DEVICES.
- INSTALL REFLECTORIZED BARRELS AS NEEDED.
- TEMPORARY LANE CLOSURES WILL BE ALLOWED CONSISTENT WITH REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- CONSTRUCT PERMANENT TRAFFIC SIGNAL AT EAST ROAD.
- CONSTRUCT TEMPORARY WIDENING FROM STA. 1239+50 TO STA. 1253+00, LT.
  - DO NOT INSTALL THE TWO PROPOSED HYDRANTS AT STA. 1242+06 AND 1246+99, IN THIS PHASE. THESE TWO HYDRANTS WILL BE INSTALLED FOLLOWING THE REMOVAL OF THE TEMPORARY WIDENING.
- CONSTRUCT WESTERLY PORTION OF NH 125 ROADWAY.
  - STA. 1239+25 TO STA. 1251+00, LT
  - STA. 1255+25 TO STA. 1272+10, LT
- CONSTRUCT SERVICE ROAD
  - STA. 102+00 TO STA. 119+00
    - ADD EMBANKMENT/BASE COURSE MATERIAL AS NEEDED DUE TO SETTLEMENT.
    - INSTALL DRAINAGE, PERFORM FINAL GRADING AND PLACE PAVEMENT.
  - STA. 119+00 TO END
    - CONSTRUCT EMBANKMENT, BASE COURSE MATERIAL, DRAINAGE, PERFORM FINAL GRADING AND PLACE PAVEMENT.

PHASE 3 (CONTINUED)

- CONSTRUCT BMP #4
  - INSTALL DRAINAGE COMPONENTS.
- CONSTRUCT OLD ROAD
- CONSTRUCT ACCESS ROAD

LEGEND

- TEMPORARY WIDENING
- TRAFFIC
- CONSTRUCTION AREA
- REFLECTORIZED BARRELS

100 0 100 200
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

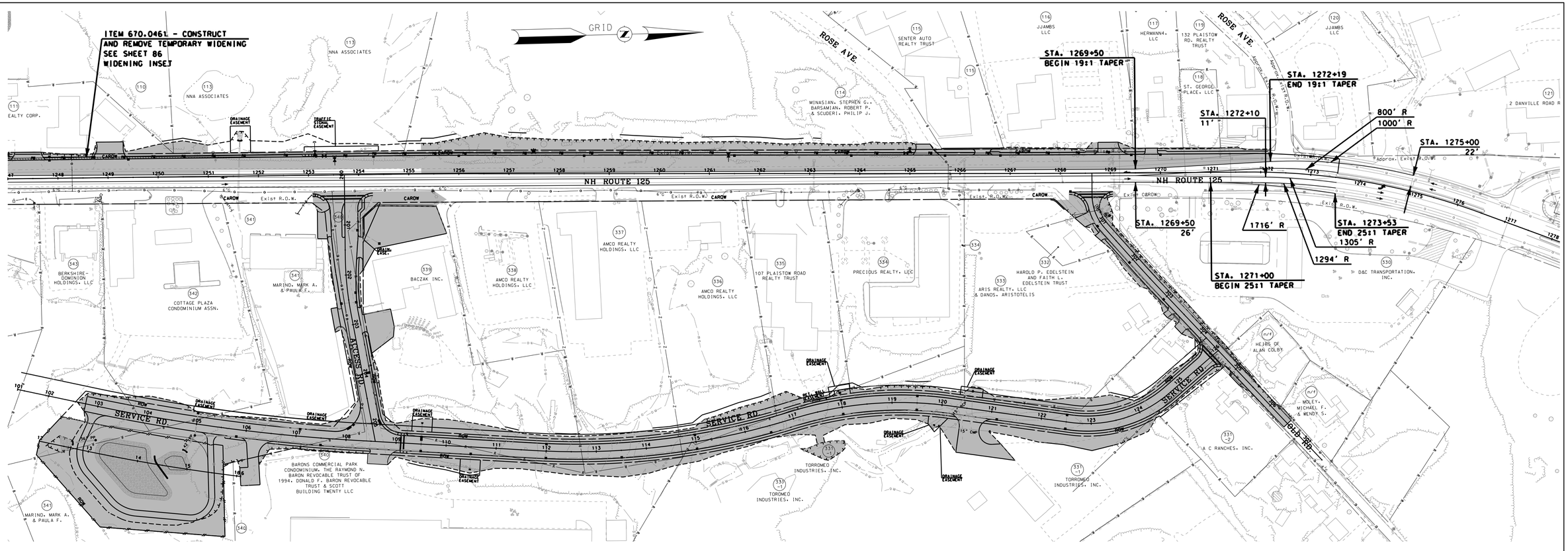
TRAFFIC CONTROL PHASE 3

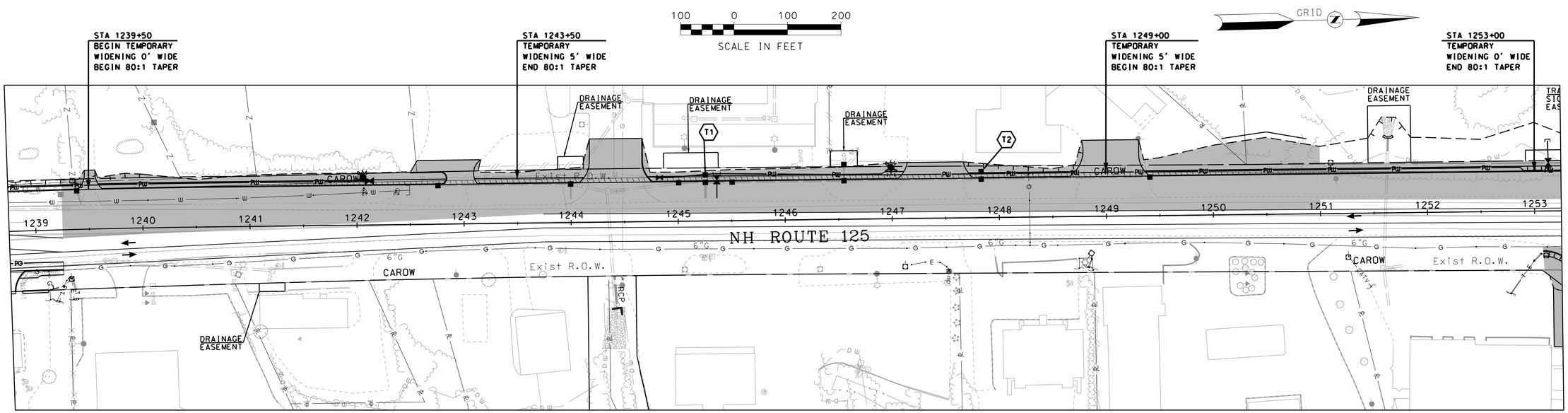
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP3	10044G	85	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE





WIDENING INSET

NUMBER	DATE	DESCRIPTION	STATION	STATION
		REVISIONS AFTER PROPOSAL		

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

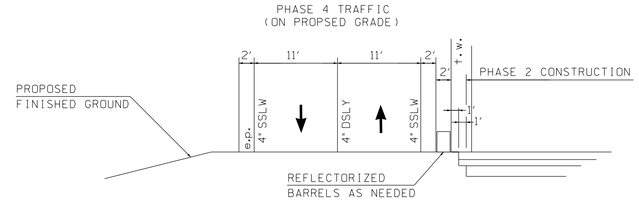
VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

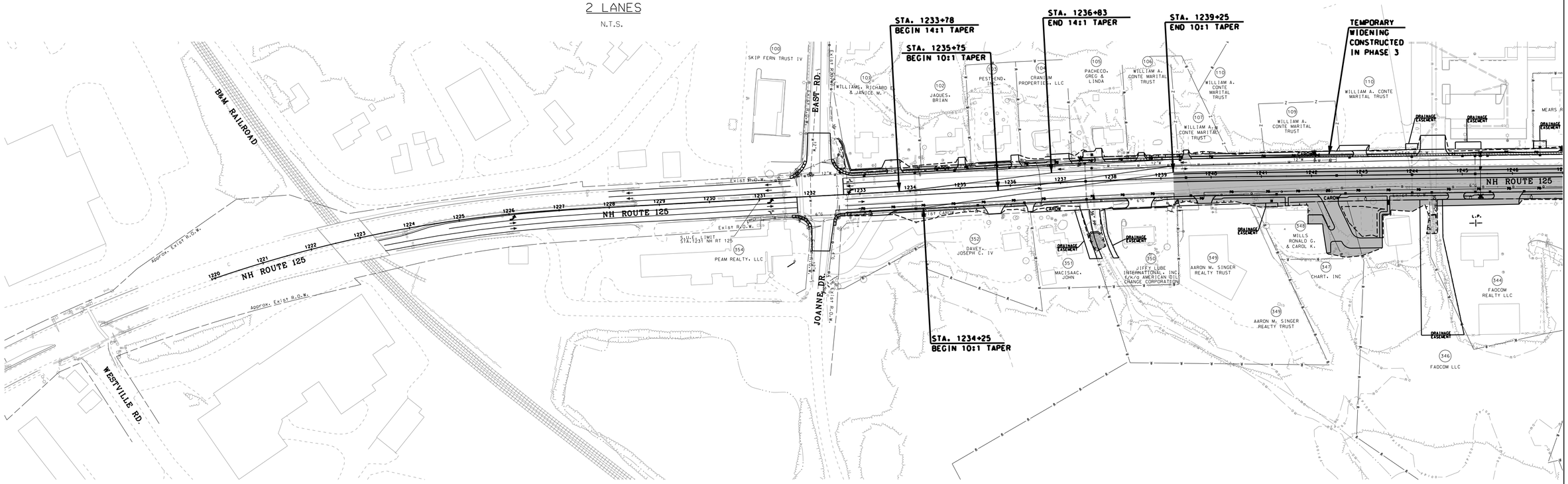
TRAFFIC CONTROL PHASE 3

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP3	10044G	86	179



CONSTRUCTION PHASING TYPICAL
2 LANES

N.T.S.



GENERAL NOTES

- TRAFFIC CONTROL DESIGN SPEED = 35 MPH
- NIGHT WORK MAY BE REQUIRED IN CONSTRICTED AREAS, ESPECIALLY WHERE TWO DAYTIME LANES ARE REQUIRED BUT CANNOT BE ATTAINED BY STANDARD PHASED CONSTRUCTION. SEE REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- ACCESS TO EXISTING DRIVES AND CONNECTING ROADS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE NOTED.
- CONSTRUCTION SIGNING SHALL BE INSTALLED AND MAINTAINED ACCORDING TO NHDOT STANDARDS. EXISTING WARNING, REGULATORY AND GUIDE SIGNS SHALL BE ADJUSTED, RELOCATED, COVERED AND/OR SUPPLEMENTED BY TEMPORARY SIGNS TO ACCOMMODATE THE LANE ARRANGEMENTS AND TRAFFIC CONDITIONS UNDER EVERY PHASE.

PHASE 4

- ADJUST CONSTRUCTION SIGNAGE AND WARNING DEVICES.
- INSTALL REFLECTORIZED BARRELS AS NEEDED.
- TEMPORARY LANE CLOSURES WILL BE ALLOWED CONSISTENT WITH REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- CONSTRUCT EASTERLY PORTION OF NH 125 ROADWAY.
  - STA. 1239+25, RT TO STA. 1271+88, RT
- CONSTRUCT PERMANENT TRAFFIC SIGNAL AT ACCESS ROAD.

LEGEND

- TEMPORARY WIDENING
- TRAFFIC
- CONSTRUCTION AREA
- REFLECTORIZED BARRELS

100 0 100 200
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

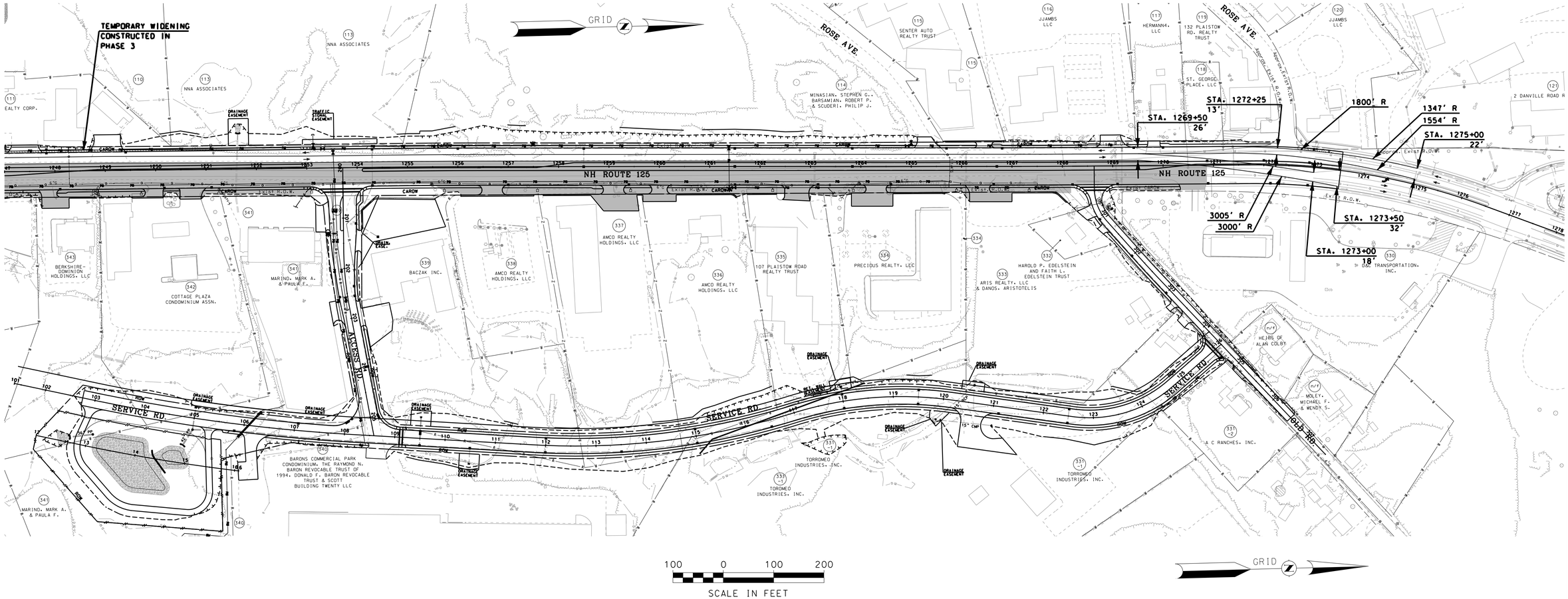
TRAFFIC CONTROL
PHASE 4

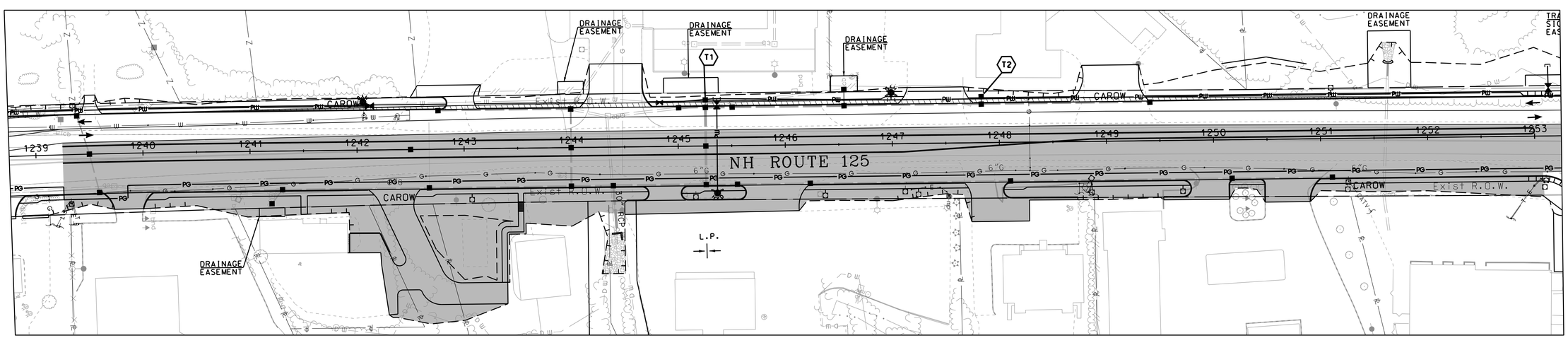
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP4	10044G	87	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE





WIDENING INSET

50 0 50 100
SCALE IN FEET

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION	STATION

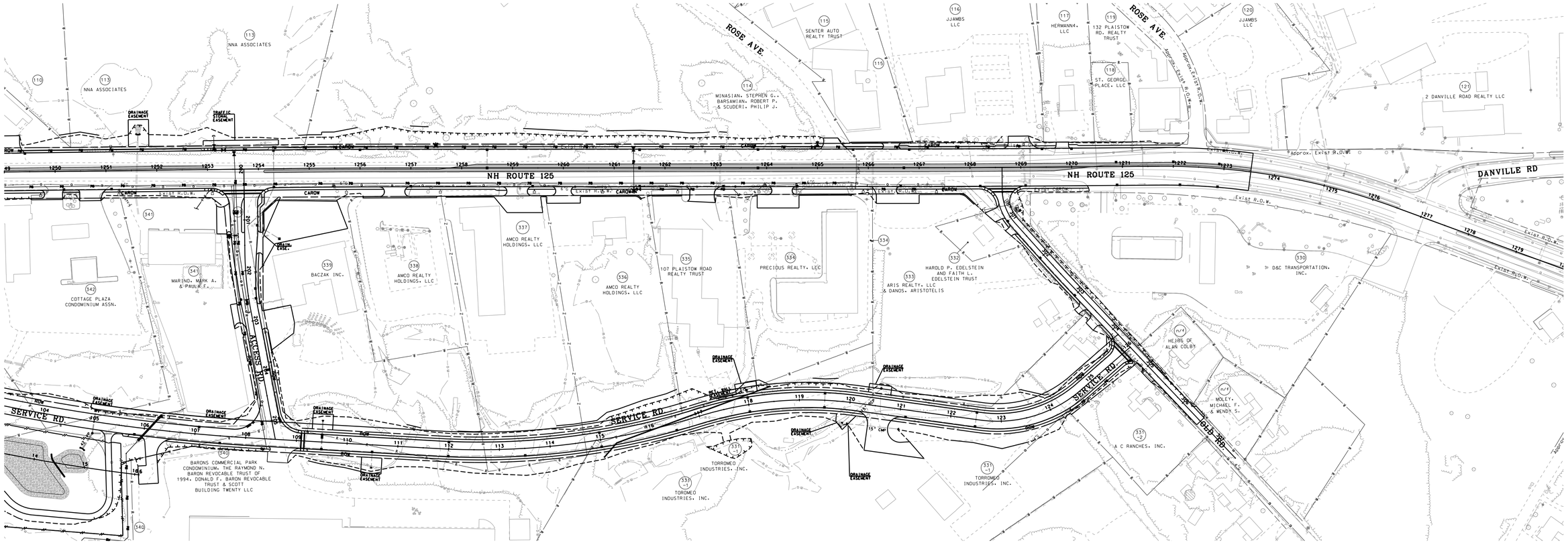
VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

TRAFFIC CONTROL PHASE 4

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP4	10044G	88	179



NUMBER	DATE	STATION	STATION	DESCRIPTION
				REVISIONS AFTER PROPOSAL

SDR PROCESSED VHB TEAM	DATE 7/2009	
NEW DESIGN F. KOCZALKA	DATE 9/2014	
SHEET CHECKED A. GRANDE	DATE 8/2015	
AS BUILT DETAILS	DATE	

100 0 100 200

SCALE IN FEET

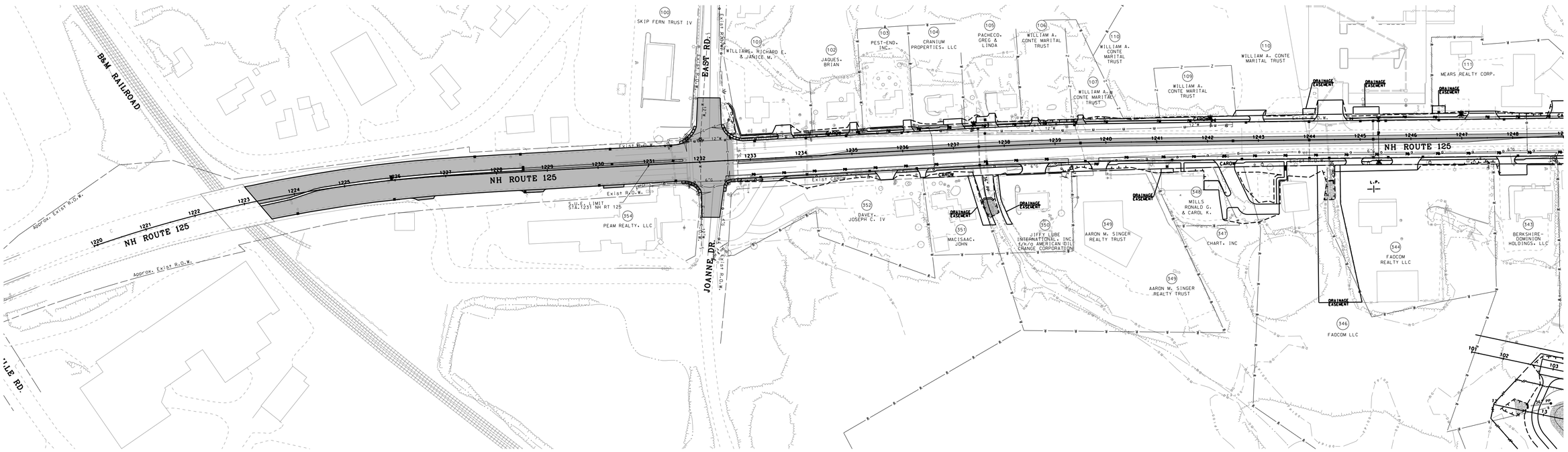
VHB Vanasse Hangen Brustlin, Inc.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

TRAFFIC CONTROL PHASE 5

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP5	10044G	90	179



GENERAL NOTES

- TRAFFIC CONTROL DESIGN SPEED = 35 MPH
- NIGHT WORK MAY BE REQUIRED IN CONSTRICTED AREAS, ESPECIALLY WHERE TWO DAYTIME LANES ARE REQUIRED BUT CANNOT BE ATTAINED BY STANDARD PHASED CONSTRUCTION. SEE REQUIREMENTS IN TRAFFIC CONTROL NARRATIVE IN PROPOSAL.
- ACCESS TO EXISTING DRIVES AND CONNECTING ROADS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE NOTED.
- CONSTRUCTION SIGNING SHALL BE INSTALLED AND MAINTAINED ACCORDING TO NHDOT STANDARDS. EXISTING WARNING, REGULATORY AND GUIDE SIGNS SHALL BE ADJUSTED, RELOCATED, COVERED AND/OR SUPPLEMENTED BY TEMPORARY SIGNS TO ACCOMMODATE THE LANE ARRANGEMENTS AND TRAFFIC CONDITIONS UNDER EVERY PHASE.

PHASE 5

- SOUTHBOUND PAVEMENT REHBILITATION FROM B&M RAILROAD BRIDGE TO EAST ROAD INTERSECTION.
  - CONSTRUCT PAVEMENT REHABILITATION OF THE NH125 SOUTHBOUND LANES DURING NIGHTTIME OPERATIONS.
  - AT THE EAST ROAD INTERSECTION, SHIFT NH125 SOUTHBOUND TRAFFIC ONTO THE WESTERLY NORTHBOUND LANE UNTIL THE WESTVILLE ROAD INTERSECTION WHERE THE SOUTHBOUND TRAFFIC WILL SHIFT BACK TO ITS PRESENT CONDITION TO AVOID IMPACTS TO THE MORNING COMMUTE.
  - COVER "KEEP RIGHT" SIGN AT WESTVILLE ROAD.
- NORTHBOUND PAVEMENT REHBILITATION FROM B&M RAILROAD BRIDGE TO EAST ROAD INTERSECTION.
  - CONSTRUCT PAVEMENT REHABILITATION OF THE NH125 NORTHBOUND LANES DURING NIGHTTIME OPERATIONS.
  - AT THE EAST ROAD INTERSECTION, SHIFT NH125 NORTHBOUND TRAFFIC ONTO THE WESTERLY SOUTHBOUND LANE UNTIL THE WESTVILLE ROAD INTERSECTION WHERE THE NORTHBOUND TRAFFIC WILL SHIFT BACK TO ITS PRESENT CONDITION TO AVOID IMPACTS TO THE MORNING COMMUTE.
  - COVER "KEEP RIGHT" SIGN AT WESTVILLE ROAD.

PHASE 5 (CONTINUED)

- PLACE NH125 TRAFFIC ON ULTIMATE ROADWAY.
- REMOVE TEMPORARY WIDENING ON WESTERLY SIDE OF NH125.
- PLACE CURBING ALONG EAST SIDE OF NH125 AND AT ALL REMAINING LOCATIONS.
- CONSTRUCT MEDIAN ISLANDS AND LANDSCAPING.
- COMPLETE FINAL WEARING COURSE AND APPLY FINAL PAVEMENT MARKINGS OVER ENTIRE PROJECT.

LEGEND

- TEMPORARY WIDENING
- TRAFFIC
- CONSTRUCTION AREA
- REFLECTORIZED BARRELS

100 0 100 200
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

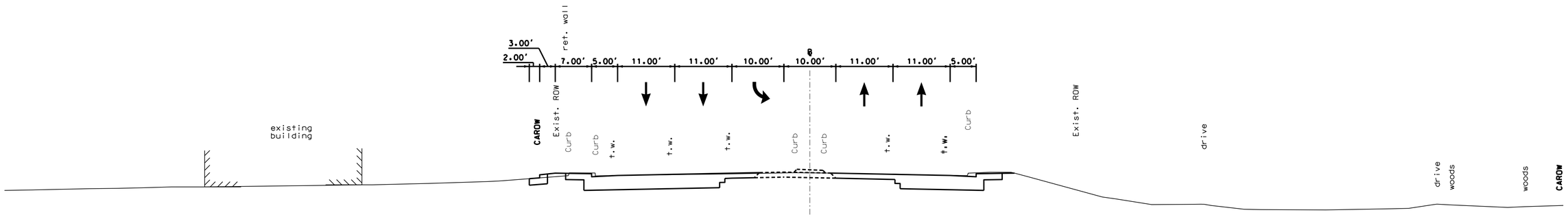
STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

TRAFFIC CONTROL PHASE 5

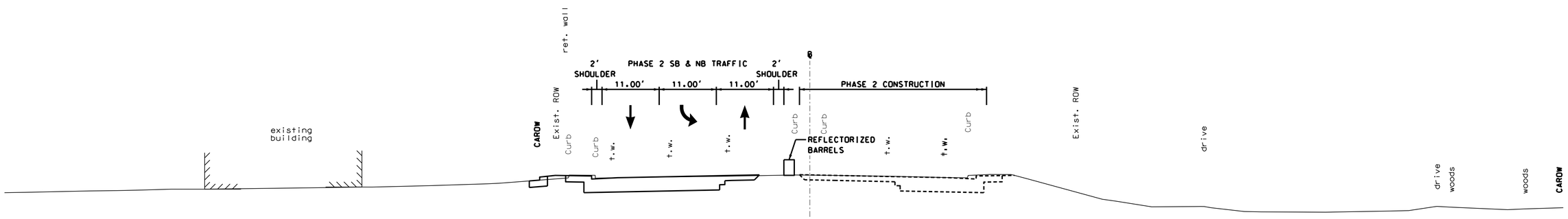
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCP5	10044G	89	179

REVISIONS AFTER PROPOSAL			
STATION	STATION	NUMBER	DATE	DESCRIPTION

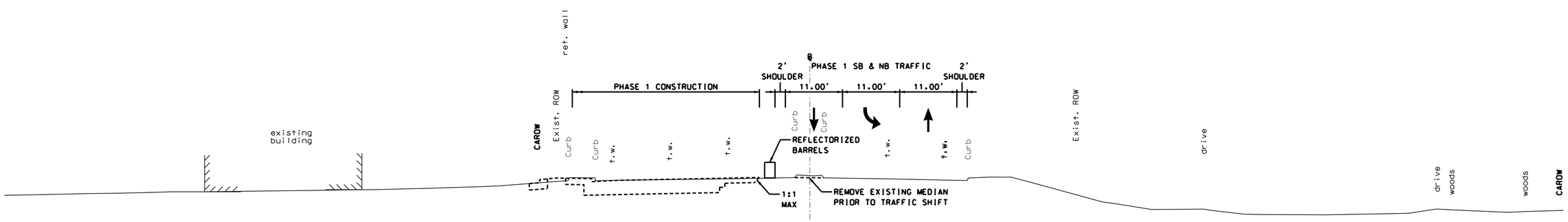
SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



PHASE 5/FINAL CONDITION



NH ROUTE 125
PHASE 2



NH ROUTE 125
PHASE 1
(STA. 1233+00)

NH ROUTE 125
TCP CRITICAL SECTIONS

10 0 10 20
SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.
9/2/2015	51272.01

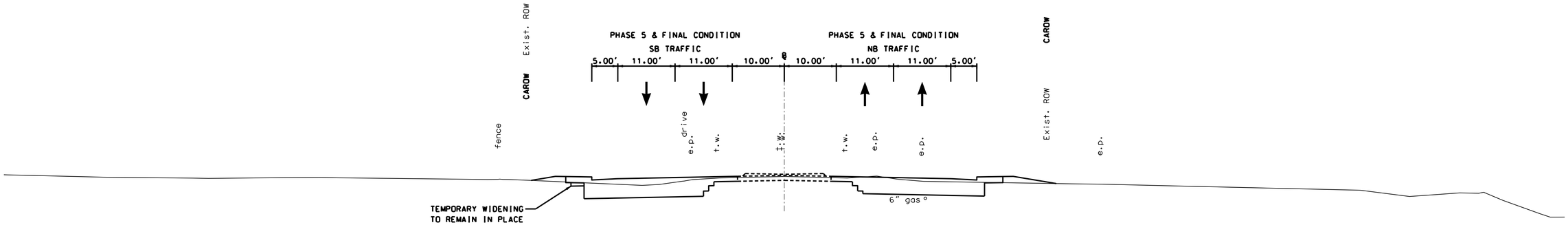
SHEET TOTALS
COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.
FILL – C.Y. MUCK EXCAV. – C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10044GTCPcs	10044G	91	179

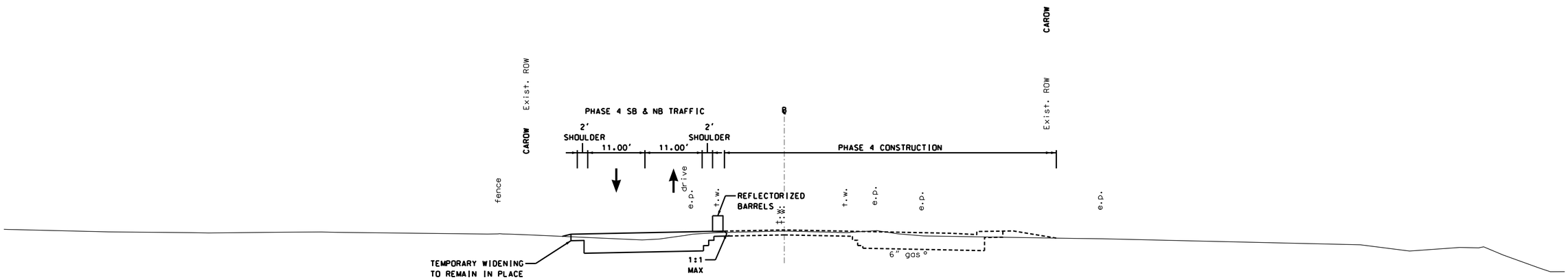
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

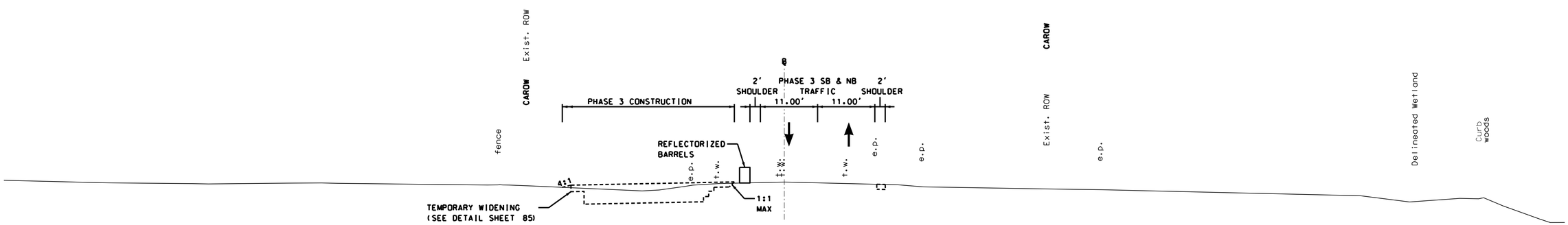
SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



PHASE 5/FINAL CONDITION



NH ROUTE 125
PHASE 4



NH ROUTE 125
PHASE 3
(STA. 1246+50)

NH ROUTE 125
TCP CRITICAL SECTIONS

10 0 10 20
SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

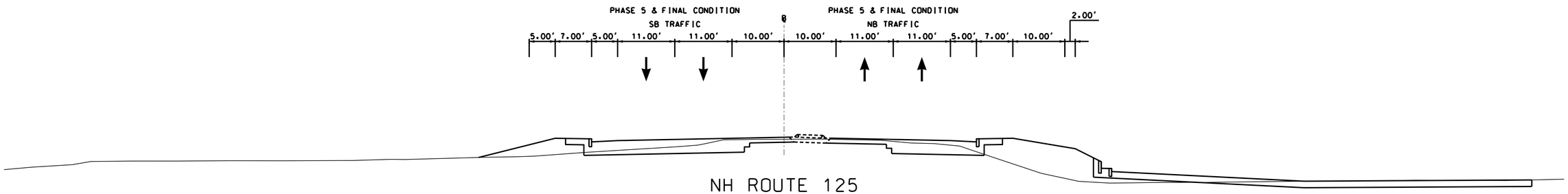
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCPcs	10044G	92	179

SHEET TOTALS
COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.
FILL – C.Y. MUCK EXCAV. – C.Y.

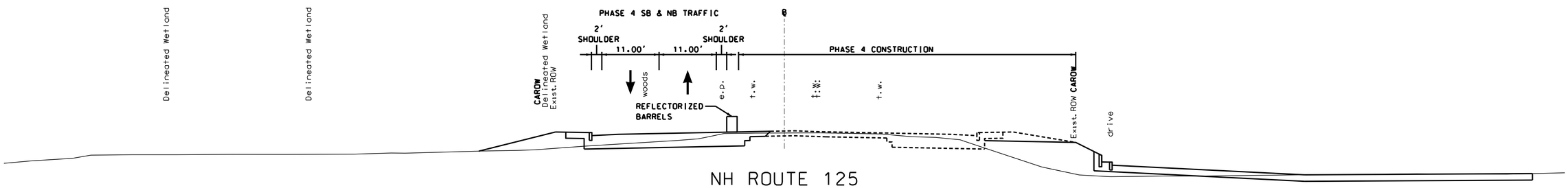
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

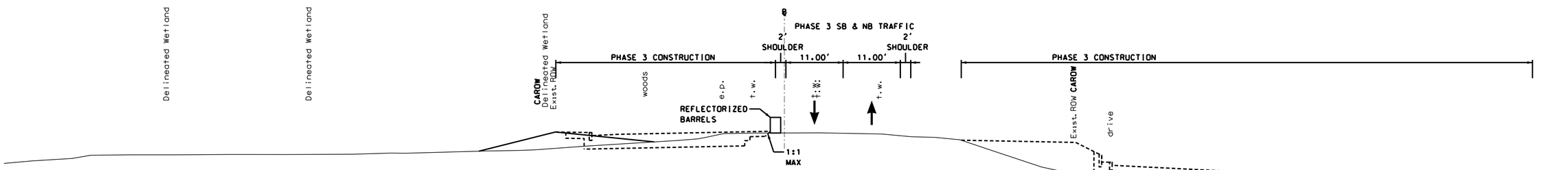
SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



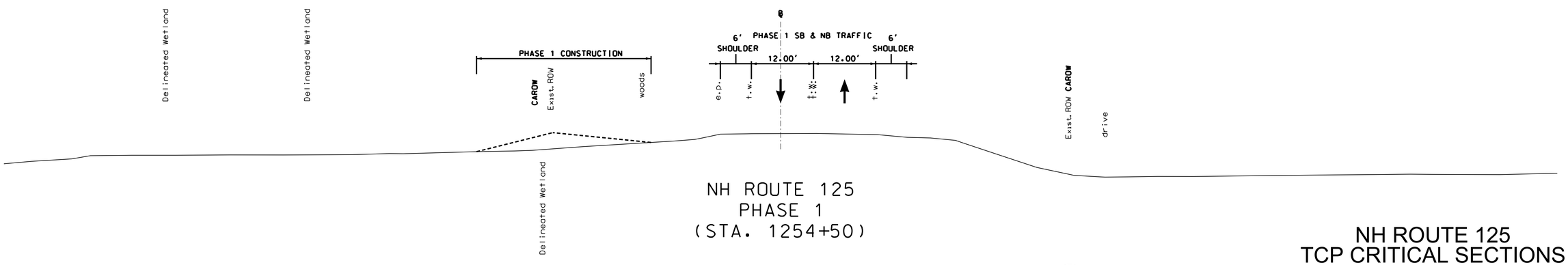
NH ROUTE 125
PHASE 4



NH ROUTE 125
PHASE 4



NH ROUTE 125
PHASE 3



NH ROUTE 125
PHASE 1
(STA. 1254+50)

NH ROUTE 125
TCP CRITICAL SECTIONS

10 0 10 20
SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

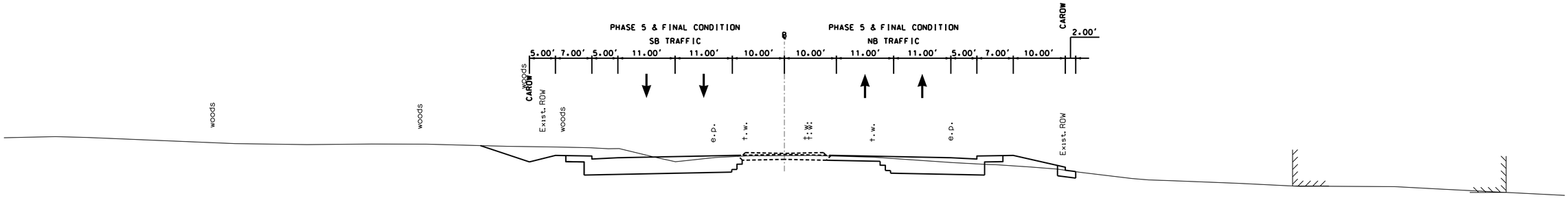
SHEET TOTALS			
COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCPcs	10044G	93	179

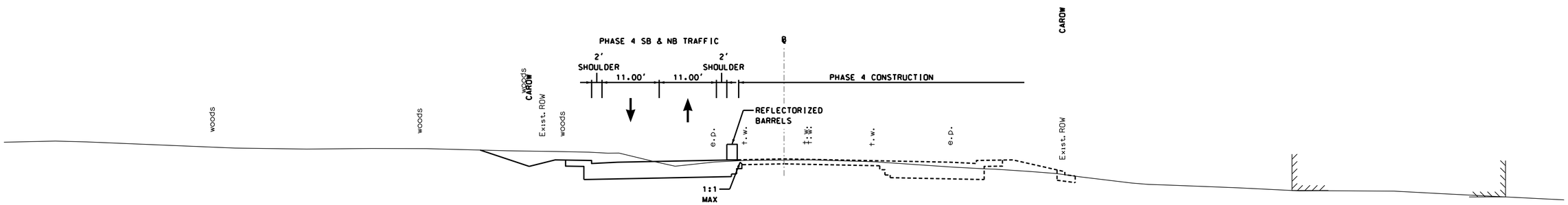
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

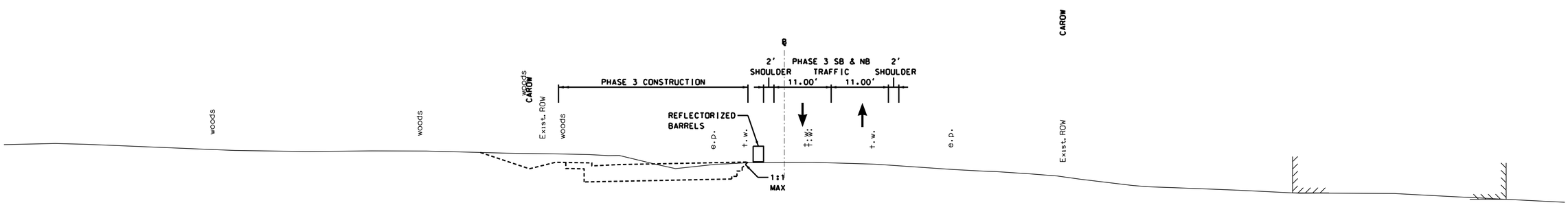
SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



PHASE 5/FINAL CONDITION



NH ROUTE 125
PHASE 4



NH ROUTE 125
PHASE 3
(STA. 1261+00)

NH ROUTE 125
TCP CRITICAL SECTIONS

10 0 10 20
SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	10044GTCPcs	10044G	94	179

SHEET TOTALS
COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.
FILL – C.Y. MUCK EXCAV. – C.Y.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

KEY NOTES:

1. LOCATE PIPE JOINT SOUTH OF CONNECTION POINT AND VERIFY THAT FULLY RESTRAINED (SOLID PIPE) DISTANCE EXCEEDS THE MINIMUM DISTANCES IN DETAIL 4, SHEET 99. MAKE CONNECTION USING MECHANICALLY–RESTRAINED JOINT COUPLING (ITEM 611.70012), 12" GV (ITEM 611.71012), INSTALL FITTINGS OR BENDS (ITEM 611.70012), IF NECESSARY, TO ALIGN NEW PIPE AT 40.5' LT (SEE SECTIONS). INSTALL MECHANICALLY RESTRAINT COUPLINGS USING GRIP RINGS FOR PVC CONNECTION. FIELD LOCATE ALL BENDS AND FITTINGS, RECORDED INFORMATION TO BE SUBMITTED TO THE TOWN OF PLAISTOW.

2. CONSTRUCT 12" PVC DR–14 WATER MAIN (ITEM 611.21412) STA 1234+00, 40.5' LT TO STA 1268+80, 41.5' LT. CONSTRUCT 2" x 4' LONG x 2' HIGH RIGID INSULATION (DOUBLE THICKNESS) BETWEEN NEW 12" WATER MAIN AND DRAINAGE STRUCTURES G18, G8, G10, G13, F1, F8, F9, F11, F14, F15, F17, F20, F22, E30, E31, E32, E35, E36, E37. (ITEM 611.9512 x 3.6 SY PER EACH STRUCTURE). SHEET NO. 99, DETAIL #7.

9. THE EXISTING WATER MAIN FROM STA 1234+00 (40' LT) RUNNING TO STA 1242+50 LT SHALL BE REMOVED, SUBSIDIARY.

12. CONSTRUCT NEW 12" x 6" ANCHOR TEE (ITEM 611.70012) AND 6" GATE VALVE (ITEM 611.71006). CONNECT GV USING MJ x MJ ADAPTER (SUBSIDIARY). RELOCATE HYDRANT (ITEM 611.811), SEE SCHEDULE AND GENERAL NOTE 3.

17. ADJUST EXISTING WATER VALVE BOX TO NEW FINISH PAVEMENT GRADES (ITEM 611.90001)

GENERAL WATER NOTES:

1. THE CONTRACTOR SHALL SEQUENCE HIS OPERATIONS TO MAINTAIN EXISTING WATER SERVICES, PER 611.1.2 IN THE 611 SPECIAL PROVISIONS. IN ADDITION TO MEETING THE REQUIREMENTS OF 611.1.2 FOR PARCEL 110 AT STA 1243+00 LT. (TRACTOR SUPPLY) THE CONTRACTOR SHALL SUBMIT A WATER PLAN OF ACTION TO JOHN McARDLE, CHIEF, PLAISTOW FIRE DEPARTMENT AND THE ENGINEER FOR REVIEW AND APPROVAL.
2. RETAIN EXISTING WATER MAIN. PLAISTOW FIRE DEPT. RECENTLY RELOCATED THE HYDRANT AND CONSTRUCTED WATER MAIN (2012) FROM STA 1242+00, LT 42' TO A CAPPED END AT STA 1245+00, 42' LT. COMMON STRUCTURE EXPLORATORY EXCAVATION (ITEM 206.19) WILL BE USED FOR TEST PITS TO LOCATE EXISTING PIPE AND PIPE JOINTS/FITTINGS.
3. ALL NEW HYDRANTS, CAPPED WATER MAINS, AND SERVICE LOCATIONS SHALL BE STAKED IN THE FIELD BY THE CONTRACTOR AND REVIEWED WITH THE ENGINEER AND JOHN McARDLE, CHIEF, PLAISTOW FIRE DEPARTMENT.
4. INSTALLATION OF NEW WATER MAIN IS ANTICIPATED IN CLOSE PROXIMITY TO EXISTING UTILITY POLES. CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING STABILIZATION OF UTILITY POLES WITH UTILITY OWNERS. SUBSIDIARY TO WATER MAIN ITEMS.
5. ALL WATER LINE WORK DEPICTED SHALL BE CONSTRUCTED WITHIN THE RIGHT–OF–WAY. EASEMENTS ARE NOT ANTICIPATED AND WILL NOT BE SECURED.

TEST PIT SCHEDULE

0 COMMON STRUCTURE EXCAVATION EXPLORATORY (ITEM 206.19) TO LOCATE EXISTING WATER MAIN/DRAIN

STATION*	DESCRIPTION
@ STA 1234+00 LT 40'	LOCATE PIPE JOINT FLANGE SEE 1
@ STA 1242+10 LT 42'	LOCATE EXIST 12" DI, SEE 10
@ STA 1244+95 LT 41'	LOCATE END OF PIPE NORTH OF GV, SEE 11
@ STA 1268+78 LT 42'	LOCATE END OF PIPE APPROXIMATELY 18' SOUTH OF GV, SEE 12

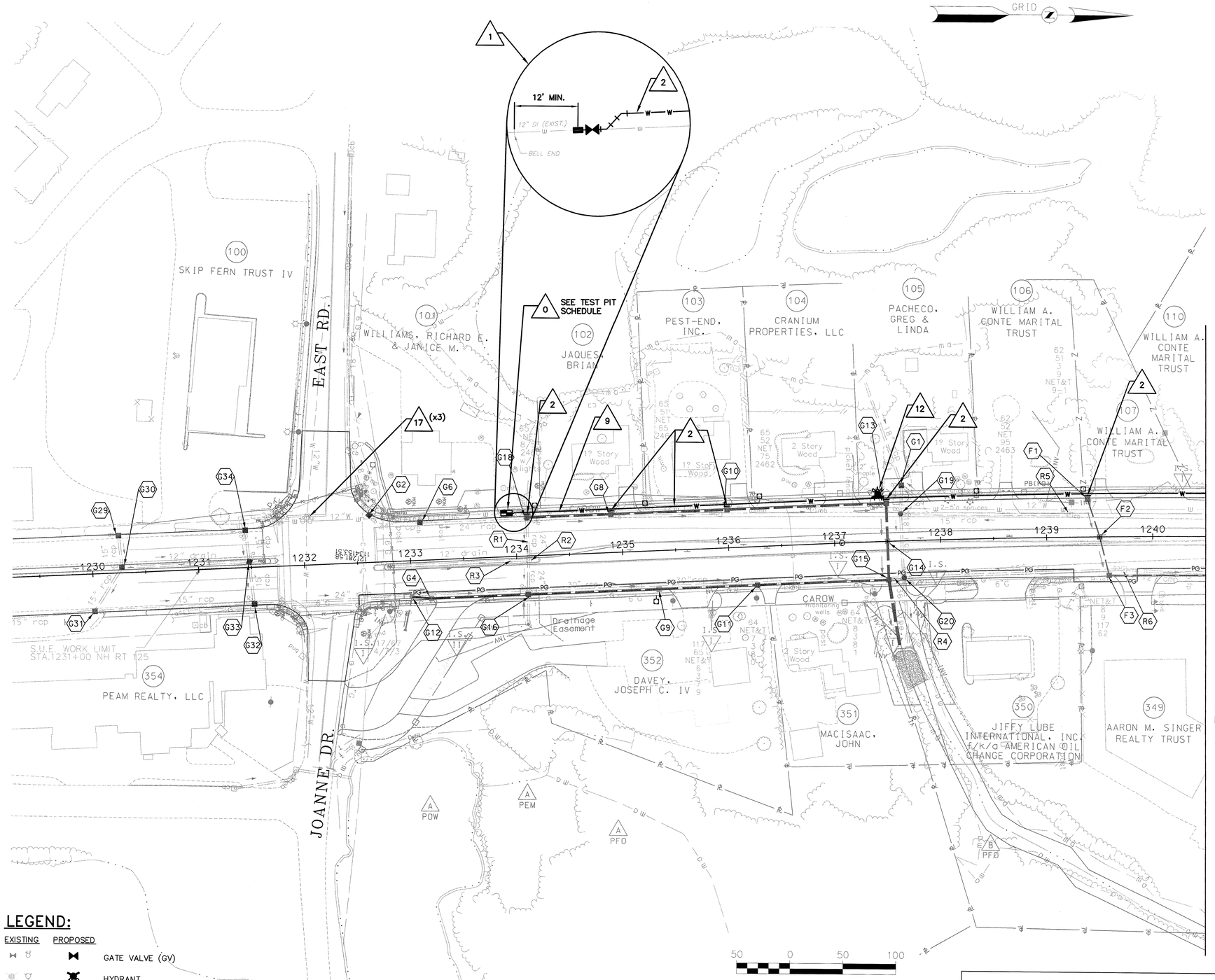
* ADJUST LOCATIONS AS REQUIRED FOLLOWING DIG–SAFE FIELD MARKINGS

WATER MAIN LOCATION SCHEDULE

STATION	MAIN	HYDRANT*	IN–LINE VALVE
1231+80	–	Retain Existing @ 50' LT	–
1234+00	40.5' LT	–	40.5' LT
1237+45	–	Relocate Existing to 45' LT	–
1242+07	–	Relocate Existing to 45' LT	–
1242+10	41' LT	–	41' LT
1244+90	41' LT	–	Retain Existing
1245+36	44' LT	44' RT	–
1247+00	41' LT	48' LT	–
1252+87	41' LT		
1252+90	38' LT		
1253+30	38' LT	–	38' LT
1253+40	38' LT	130' RT (201+30 RT)	–
1254+19	38' LT	–	–
1254+22	41' LT	–	–
1257+50	41' LT	44' LT	–
1261+40	42' LT	44' RT	42' LFT
1264+85	41' LT	48' LT	–
1264+90	41' LT	–	41' LT
1268+90	–	Existing @ 80' RT	–
1269+00	41.5' LT	–	Existing @ 41.5' LT

* NOTES:

1. LOCATE HYDRANTS AT BACK OF SIDEWALK, SEE GENERAL NOTE 3.



LEGEND:

EXISTING	PROPOSED	
		GATE VALVE (GV)
		HYDRANT
		WATER LINE
		DRAIN
		GAS

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED — DATE
NEW DESIGN — DATE
SHEET CHECKED — DATE
AS BUILT DETAILS — DATE

STATE OF NEW HAMPSHIRE PHILIP W. McDONALD No. 7642 LICENSED PROFESSIONAL ENGINEER

Drawn/Chk RMG
Designed FGU
Checked PDM
Approved –
Date 09/02/2015
Book No. –
Project No. 1643
Dwg. ID 1643_BASE
Scale AS–SHOWN

UNDERWOOD engineers
25 Vaughan Mall, Portsmouth, N.H. 03801
Tel. 603–436–6192 Fax. 603–431–4733

DATE	REVISIONS	APP'D

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

WATER IMPROVEMENTS–PLAN
NEW HAMPSHIRE RTE 125
PLAISTOW–EAST ROAD TO OLD ROAD

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
	10044G	95	179

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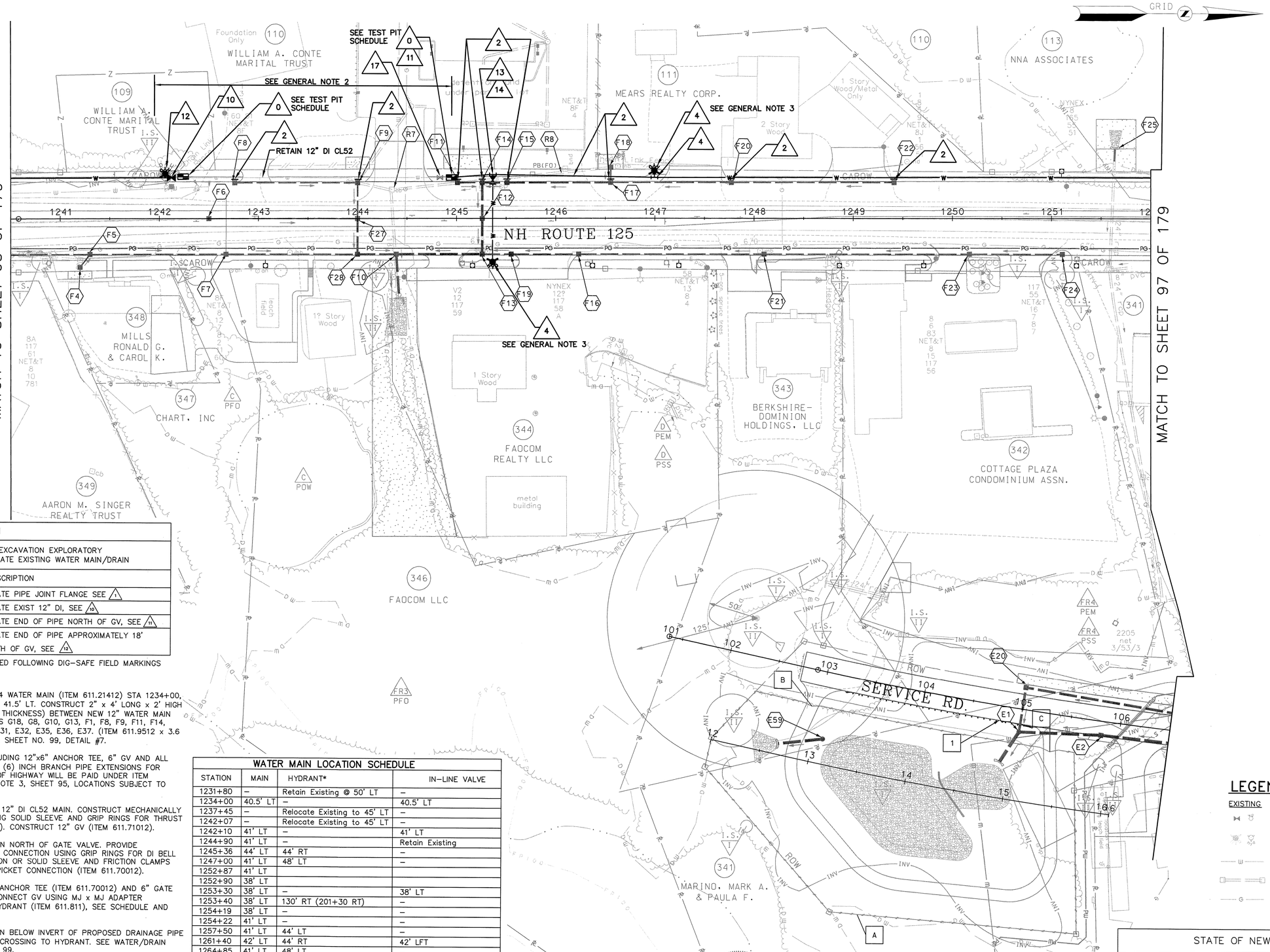


TEST PIT SCHEDULE

0 COMMON STRUCTURE EXCAVATION EXPLORATORY (ITEM 206.19) TO LOCATE EXISTING WATER MAIN/DRAIN

STATION*	DESCRIPTION
@ STA 1234+00 LT 40'	LOCATE PIPE JOINT FLANGE SEE 1
@ STA 1242+10 LT 42'	LOCATE EXIST 12" DI, SEE 10
@ STA 1244+95 LT 41'	LOCATE END OF PIPE NORTH OF GV, SEE 11
@ STA 1268+78 LT 42'	LOCATE END OF PIPE APPROXIMATELY 18' SOUTH OF GV, SEE 12

* ADJUST LOCATIONS AS REQUIRED FOLLOWING DIG-SAFE FIELD MARKINGS

KEY NOTES:

2 CONSTRUCT 12" PVC DR-14 WATER MAIN (ITEM 611.21412) STA 1234+00, 40.5' LT TO STA 1268+80, 41.5' LT. CONSTRUCT 2" x 4' LONG x 2' HIGH RIGID INSULATION (DOUBLE THICKNESS) BETWEEN NEW 12" WATER MAIN AND DRAINAGE STRUCTURES G18, G8, G10, G13, F1, F8, F9, F11, F14, F15, F17, F20, F22, E30, E31, E32, E35, E36, E37. (ITEM 611.9512 x 3.6 SY PER EACH STRUCTURE). SHEET NO. 99, DETAIL #7.

4 CONSTRUCT HYDRANT INCLUDING 12"x6" ANCHOR TEE, 6" GV AND ALL FITTINGS (ITEM 611.81). SIX (6) INCH BRANCH PIPE EXTENSIONS FOR HYDRANTS ON EAST SIDE OF HIGHWAY WILL BE PAID UNDER ITEM 611.05206. SEE GENERAL NOTE 3, SHEET 95, LOCATIONS SUBJECT TO REVIEW.

10 LOCATE AND CUT EXISTING 12" DI CL52 MAIN. CONSTRUCT MECHANICALLY RESTRAINED COUPLING USING SOLID SLEEVE AND GRIP RINGS FOR THRUST RESTRAINT (ITEM 611.70012). CONSTRUCT 12" GV (ITEM 611.71012).

11 LOCATE END OF 12" DI MAIN NORTH OF GATE VALVE. PROVIDE MECHANICALLY RESTRAINED CONNECTION USING GRIP RINGS FOR DI BELL TO PVC SPICKET CONNECTION OR SOLID SLEEVE AND FRICTION CLAMPS FOR DI SPICKET TO PVC SPICKET CONNECTION (ITEM 611.70012).

12 CONSTRUCT NEW 12" x 6" ANCHOR TEE (ITEM 611.70012) AND 6" GATE VALVE (ITEM 611.71006). CONNECT GV USING MJ x MJ ADAPTER (SUBSIDIARY). RELOCATE HYDRANT (ITEM 611.811), SEE SCHEDULE AND GENERAL NOTE 3.

13 CONSTRUCT 12" DR-14 MAIN BELOW INVERT OF PROPOSED DRAINAGE PIPE TO FACILITATE 6" BRANCH CROSSING TO HYDRANT. SEE WATER/DRAIN CROSSING DETAIL 6, SHEET 99.

14 CONSTRUCT 12"x6" DI TEE, FOSTER ADAPTOR AND 6" GV (SUBSIDIARY TO 611.81), CONSTRUCT 6" DI CL52 BRANCH PIPE BELOW DRAIN PIPES AT CROSSINGS, DETAIL 6, SHEET 99 (ITEM 611.05206).

17 ADJUST EXISTING WATER VALVE BOX TO NEW FINISH PAVEMENT GRADES (ITEM 611.90001).

WATER MAIN LOCATION SCHEDULE

STATION	MAIN	HYDRANT*	IN-LINE VALVE
1231+80	–	Retain Existing @ 50' LT	–
1234+00	40.5' LT	–	40.5' LT
1237+45	–	Relocate Existing to 45' LT	–
1242+07	–	Relocate Existing to 45' LT	–
1242+10	41' LT	–	41' LT
1244+90	41' LT	–	Retain Existing
1245+36	44' LT	44' RT	–
1247+00	41' LT	48' LT	–
1252+87	41' LT		
1252+90	38' LT		
1253+30	38' LT	–	38' LT
1253+40	38' LT	130' RT (201+30 RT)	–
1254+19	38' LT	–	–
1254+22	41' LT	–	–
1257+50	41' LT	44' LT	–
1261+40	42' LT	44' RT	42' LFT
1264+85	41' LT	48' LT	–
1264+90	41' LT	–	41' LT
1268+90	–	Existing @ 80' RT	–
1269+00	41.5' LT	–	Existing @ 41.5' LT

* NOTES:

1. LOCATE HYDRANTS AT BACK OF SIDEWALK, SEE GENERAL NOTE 3.

50 0 50 100
SCALE IN FEET

LEGEND:

EXISTING	PROPOSED	
		GATE VALVE (GV)
		HYDRANT
		WATER LINE
		DRAIN
		GAS

STATE OF NEW HAMPSHIRE
PHILIP J. MCDONALD No. 7642 LICENSED PROFESSIONAL ENGINEER

Drawn/Chk. RMG
Designed FGU
Checked PDM
Approved –
Date 09/02/2015
Book No. –
Project No. 16A3
Dwg. ID 16A3_BASE
Scale AS-SHOWN

UNDERWOOD engineers
25 Vaughan Mall, Portsmouth, N.H. 03801
Tel. 603-436-6192 Fax. 603-431-4733

DATE	REVISIONS	APP'D

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

WATER IMPROVEMENTS–PLAN
NEW HAMPSHIRE RTE 125
PLAISTOW–EAST ROAD TO OLD ROAD

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
	10044G	96	179

NUMBER	DATE	STATION	STATION	DESCRIPTION

REVISIONS AFTER PROPOSAL

SDR PROCESSED DATE
NEW DESIGN DATE
SHEET CHECKED DATE
AS BUILT DETAILS DATE

H:\Real Numbers\Plaistow\16A3 - Rte 125 Water Main Relocation\DWG\October 2014 Updated Drawings\16ABase.dwg, 96, 9/2/2015 8:52:23 AM, rmg

TEST PIT SCHEDULE

0 COMMON STRUCTURE EXCAVATION EXPLORATORY (ITEM 206.19) TO LOCATE EXISTING WATER MAIN/DRAIN

STATION*	DESCRIPTION
@ STA 1234+00 LT 40'	LOCATE PIPE JOINT FLANGE SEE 1
@ STA 1242+10 LT 42'	LOCATE EXIST 12" DI, SEE 10
@ STA 1244+95 LT 41'	LOCATE END OF PIPE NORTH OF GV, SEE 11
@ STA 1268+78 LT 42'	LOCATE END OF PIPE APPROXIMATELY 18' SOUTH OF GV, SEE 12

* ADJUST LOCATIONS AS REQUIRED FOLLOWING DIG-SAFE FIELD MARKINGS

KEY NOTES:

2 CONSTRUCT 12" PVC DR-14 WATER MAIN (ITEM 611.21412) STA 1234+00, 40.5' LT TO STA 1268+80, 41.5' LT. CONSTRUCT 2" x 4' LONG x 2' HIGH RIGID INSULATION (DOUBLE THICKNESS) BETWEEN NEW 12" WATER MAIN AND DRAINAGE STRUCTURES G18, G8, G10, G13, F1, F8, F9, F11, F14, F15, F17, F20, F22, E30, E31, E32, E35, E36, E37. (ITEM 611.9512 x 3.6 SY PER EACH STRUCTURE). SHEET NO. 99, DETAIL #7.

3 CONSTRUCT 12" x 8" TEE (ITEM TO 611.70012), MJ x MJ ADAPTOR (SUBSIDIARY), 8" GATE VALVE (ITEM 611.71008), 8" DI CL52 PIPE (ITEM 611.05208), AND END PLUG (ITEM 611.70008) AT BELL END. RESTAIN WITH FRICTION CLAMPS AND THRUST ROD (SUBSIDIARY TO 611.70008).

4 CONSTRUCT HYDRANT INCLUDING 12"x6" ANCHOR TEE, 6" GV AND ALL FITTINGS (ITEM 611.81). SIX (6) INCH BRANCH PIPE EXTENSIONS FOR HYDRANTS ON EAST SIDE OF HIGHWAY WILL BE PAID UNDER ITEM 611.05206. SEE GENERAL NOTE 3, SHEET 95, LOCATIONS SUBJECT TO REVIEW.

5 CONSTRUCT 8" DI CL52 WATER MAIN (ITEM 611.05208) BELOW DRAIN AT CROSSING, PROVIDE 12" VERTICAL SEPARATION. SEE WATER/DRAIN CROSSING DETAIL.

6 CONSTRUCT 6" x 6" DI TEE (ITEM 611.70006), 6" GATE VALVE (ITEM 611.71006), AND 6" DI CL52 (x 165') TO STA 1263+45 RT. PROVIDE MECHANICALLY RESTRAINED 45° BEND AND END PLUG (ITEM 611.70006). RESTRAIN BELL END OF RUN WITH FRICTION CLAMPS AND THRUST ROD (SUBSIDIARY TO ITEM 611.70006).

7 CONSTRUCT 12" GATE VALVE AND GRIP RINGS (ITEM 611.71012).

8 CONSTRUCT 12" x 12" TEE (ITEM 611.70012) AND 12" GATE VALVE (611.71012). CONNECT GV'S TO TEE WITH MJ x MJ ADAPTERS, SUBSIDIARY. CONNECT TEE TO PVC WITH FRICTION CLAMPS, SUBSIDIARY.

13 CONSTRUCT 12"x6" DI TEE W/ FRICTION CLAMPS FOR DR-14 CONNECTION (ITEM 611.71012). CONSTRUCT 6" GV (SUBSIDIARY TO 611.81), AND 6" DI CL52 BRANCH PIPE BELOW DRAIN PIPES AT CROSSINGS, DETAIL 6, SHEET 99 (ITEM 611.05206).

14 CONSTRUCT 12"x6" DI TEE, MJ x MJ ADAPTOR AND 6" GV (SUBSIDIARY TO 611.81), CONSTRUCT 6" DI CL52 BRANCH PIPE BELOW DRAIN PIPES AT CROSSINGS, DETAIL 6, SHEET 99 (ITEM 611.05206).

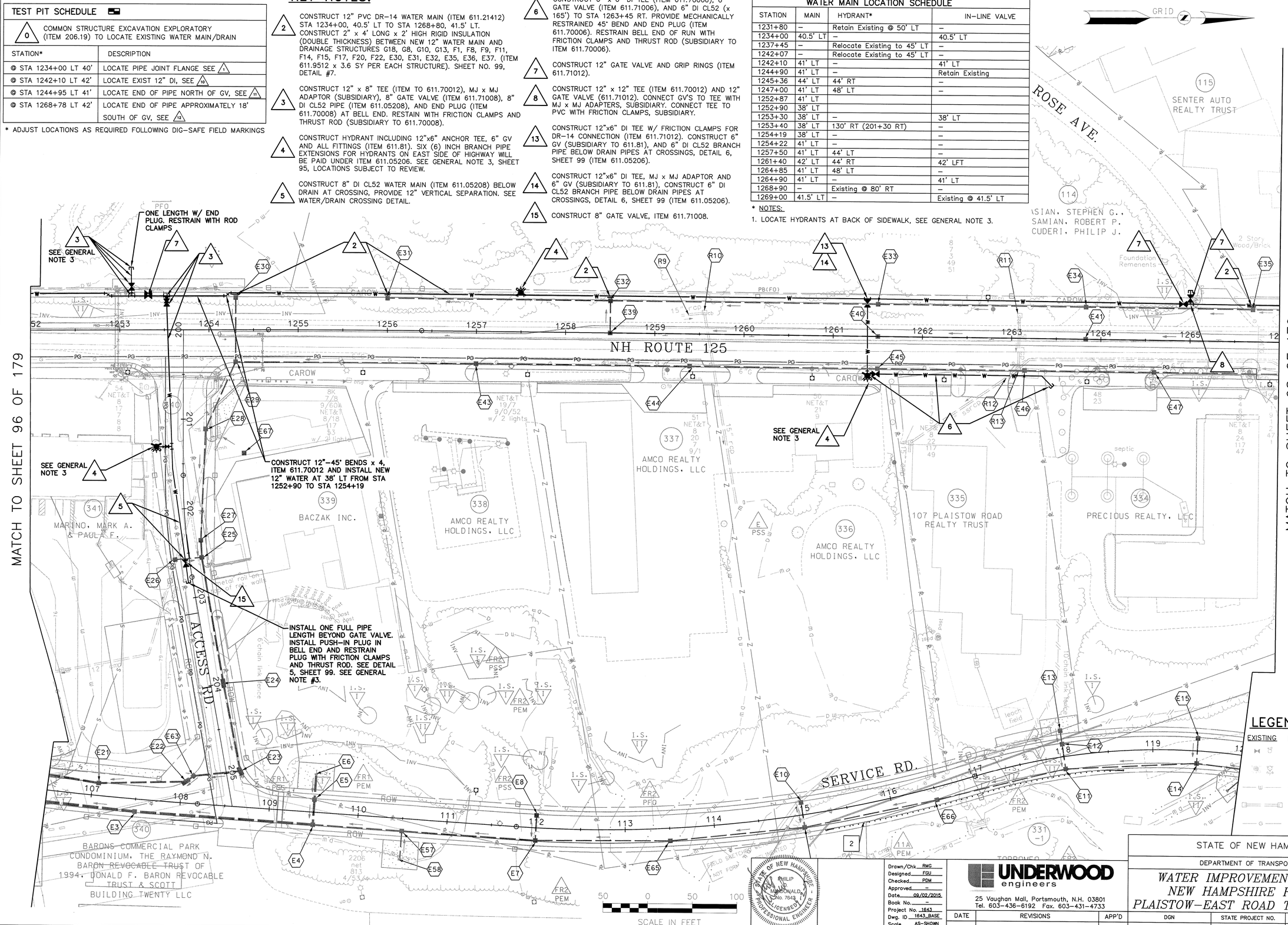
15 CONSTRUCT 8" GATE VALVE, ITEM 611.71008.

WATER MAIN LOCATION SCHEDULE

STATION	MAIN	HYDRANT*	IN-LINE VALVE
1231+80	–	Retain Existing @ 50' LT	–
1234+00	40.5' LT	–	40.5' LT
1237+45	–	Relocate Existing to 45' LT	–
1242+07	–	Relocate Existing to 45' LT	–
1242+10	41' LT	–	41' LT
1244+90	41' LT	–	Retain Existing
1245+36	44' LT	44' RT	–
1247+00	41' LT	48' LT	–
1252+87	41' LT		
1252+90	38' LT		
1253+30	38' LT	–	38' LT
1253+40	38' LT	130' RT (201+30 RT)	–
1254+19	38' LT	–	–
1254+22	41' LT	–	–
1257+50	41' LT	44' LT	–
1261+40	42' LT	44' RT	42' LFT
1264+85	41' LT	48' LT	–
1264+90	41' LT	–	41' LT
1268+90	–	Existing @ 80' RT	–
1269+00	41.5' LT	–	Existing @ 41.5' LT

* NOTES:

1. LOCATE HYDRANTS AT BACK OF SIDEWALK, SEE GENERAL NOTE 3.



LEGEND:

EXISTING	PROPOSED	
		GATE VALVE (GV)
		HYDRANT
		WATER LINE
		DRAIN
		GAS

STATE OF NEW HAMPSHIRE
PHILIP R. MCDONALD No. 7643 LICENSED PROFESSIONAL ENGINEER

Drawn/Chk. RMC
Designed FGU
Checked PDM
Approved –
Date 09/02/2015
Book No. –
Project No. 1643
Dwg. ID 1643_BASE
Scale AS-SHOWN

UNDERWOOD engineers
25 Vaughan Mall, Portsmouth, N.H. 03801
Tel. 603-436-6192 Fax. 603-431-4733

DATE	REVISIONS	APP'D

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

WATER IMPROVEMENTS–PLAN
NEW HAMPSHIRE RTE 125
PLAISTOW–EAST ROAD TO OLD ROAD

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
	10044G	97	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

	DATE
SDR PROCESSED	
NEW DESIGN	
SHEET CHECKED	
AS BUILT DETAILS	

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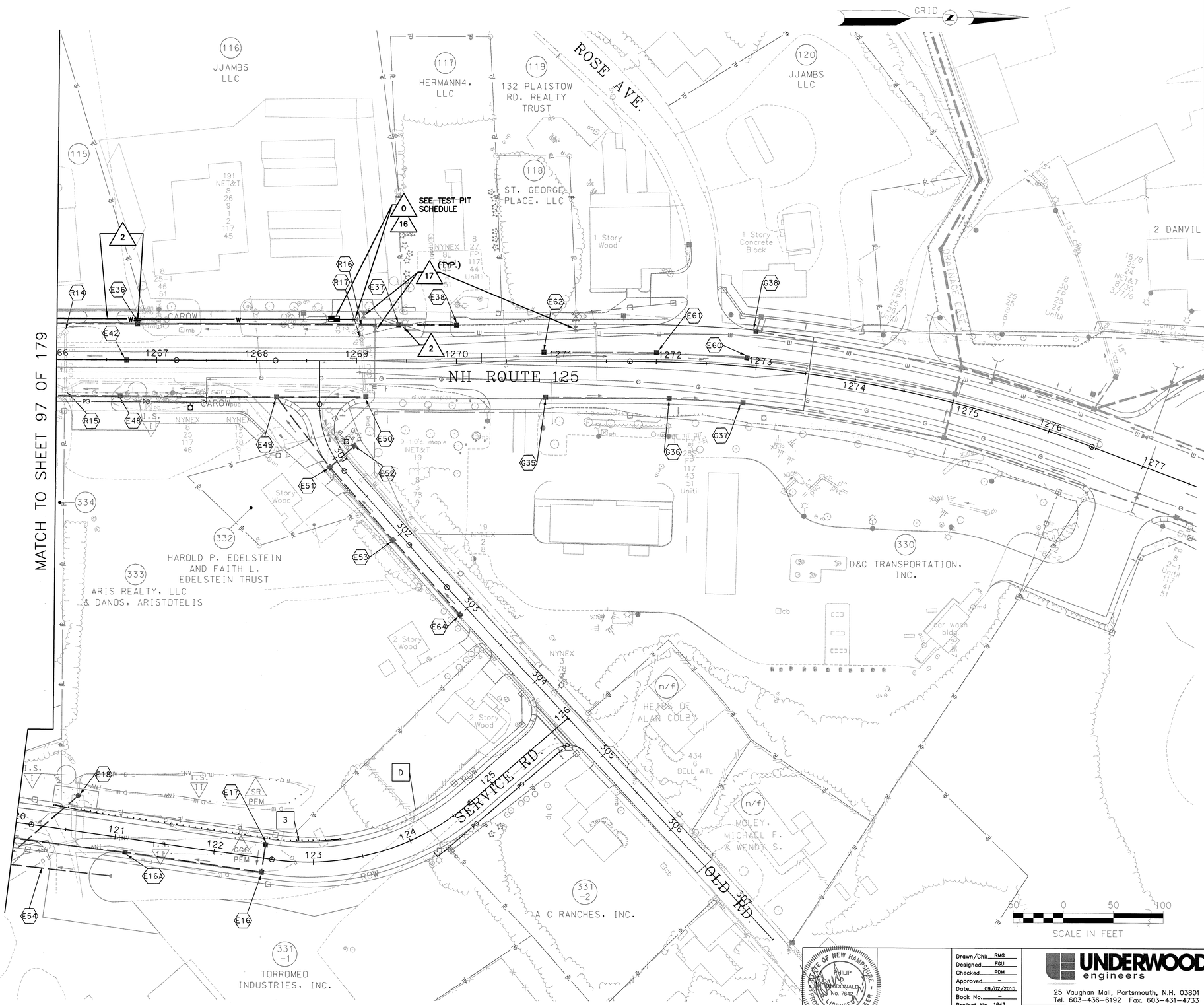

WATER MAIN LOCATION SCHEDULE			
STATION	MAIN	HYDRANT*	IN-LINE VALVE
1231+80	–	Retain Existing @ 50' LT	–
1234+00	40.5' LT	–	40.5' LT
1237+45	–	Relocate Existing to 45' LT	–
1242+07	–	Relocate Existing to 45' LT	–
1242+10	41' LT	–	41' LT
1244+90	41' LT	–	Retain Existing
1245+36	44' LT	44' RT	–
1247+00	41' LT	48' LT	–
1252+87	41' LT		
1252+90	38' LT		
1253+30	38' LT	–	38' LT
1253+40	38' LT	130' RT (201+30 RT)	–
1254+19	38' LT	–	–
1254+22	41' LT	–	–
1257+50	41' LT	44' LT	–
1261+40	42' LT	44' RT	42' LFT
1264+85	41' LT	48' LT	–
1264+90	41' LT	–	41' LT
1268+90	–	Existing @ 80' RT	–
1269+00	41.5' LT	–	Existing @ 41.5' LT

* NOTES:

1. LOCATE HYDRANTS AT BACK OF SIDEWALK, SEE GENERAL NOTE 3.

TEST PIT SCHEDULE

0 — COMMON STRUCTURE EXCAVATION EXPLORATORY (ITEM 206.19) TO LOCATE EXISTING WATER MAIN/DRAIN

STATION*	DESCRIPTION
@ STA 1234+00 LT 40'	LOCATE PIPE JOINT FLANGE SEE 1
@ STA 1242+10 LT 42'	LOCATE EXIST 12" DI, SEE 10
@ STA 1244+95 LT 41'	LOCATE END OF PIPE NORTH OF GV, SEE 11
@ STA 1268+78 LT 42'	LOCATE END OF PIPE APPROXIMATELY 18' SOUTH OF GV, SEE 12

* ADJUST LOCATIONS AS REQUIRED FOLLOWING DIG-SAFE FIELD MARKINGS

KEY NOTES:

2 — CONSTRUCT 12" PVC DR-14 WATER MAIN (ITEM 611.21412) STA 1234+00, 40.5' LT TO STA 1268+80, 41.5' LT. CONSTRUCT 2" x 4' LONG x 2' HIGH RIGID INSULATION (DOUBLE THICKNESS) BETWEEN NEW 12" WATER MAIN AND DRAINAGE STRUCTURES G18, G8, G10, G13, F1, F8, F9, F11, F14, F15, F17, F20, F22, E30, E31, E32, E35, E36, E37. (ITEM 611.9512 x 3.6 SY PER EACH STRUCTURE). SHEET NO. 99, DETAIL #7.

16 — LOCATE 12" GV AND END OF 12" PVC-DR14 WATER MAIN SOUTH OF GATE VALVE. PROVIDE MECHANICALLY RESTRAINED CONNECTION TO NEW 12" PVC-DR14 MAIN (ITEM 611.70012).

17 — ADJUST EXISTING WATER VALVE BOX TO REMAIN TO NEW FINISH PAVEMENT GRADES (ITEM 611.90001).

LEGEND:

EXISTING	PROPOSED	
		GATE VALVE (GV)
		HYDRANT
—W—	—W—	WATER LINE
		DRAIN
—G—	—PG—	GAS

STATE OF NEW HAMPSHIRE
PHILIP D. MCDONALD No. 7842 LICENSED PROFESSIONAL ENGINEER

Drawn/Chk RMG
Designed FGU
Checked PDM
Approved –
Date 08/02/2015
Book No. –
Project No. 1643
Dwg. ID 1643_BASE
Scale AS-SHOWN

UNDERWOOD engineers
25 Vaughan Mall, Portsmouth, N.H. 03801
Tel. 603-436-6192 Fax. 603-431-4733

DATE	REVISIONS	APP'D

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

WATER IMPROVEMENTS–PLAN
NEW HAMPSHIRE RTE 125
PLAISTOW–EAST ROAD TO OLD ROAD

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
	10044G	98	179

REVISIONS AFTER PROPOSAL	STATION	DATE	NUMBER	DESCRIPTION
	STATION			

	DATE
SDR PROCESSED	
NEW DESIGN	
SHEET CHECKED	
AS BUILT DETAILS	

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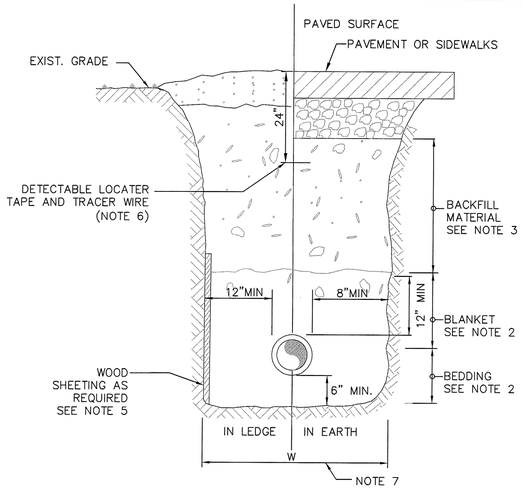


1/99 WATER MAIN TRENCH DETAIL
NOT TO SCALE

WATER TRENCH NOTES

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE; BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWINGS.

2. BEDDING AND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER (NHDOT SECTION 611.2.1.2).

3. BACKFILL MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE AS SHOWN ON TYPICAL ROAD SECTIONS, SAND OR THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS; PIECES OF PAVEMENT; ORGANIC MATTER; TOP SOIL; ALL WET OR SOFT MUCK, PEAT, OR CLAY; ALL EXCAVATED LEDGE MATERIAL; ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION; AND ANY MATERIAL WHICH WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

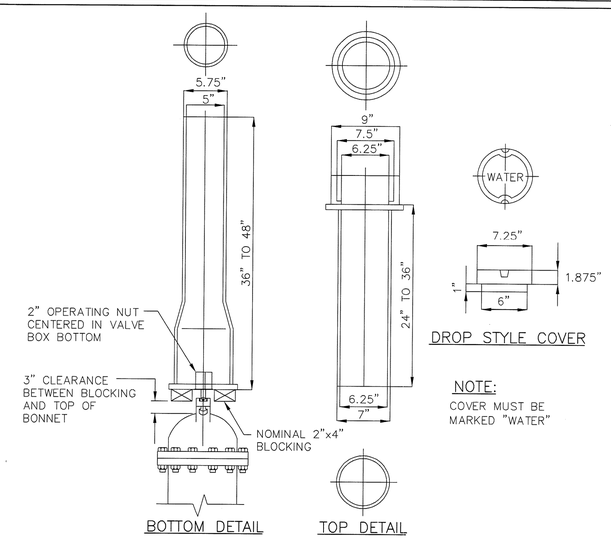
IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK, OR PEAT, IF ENGINEER IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE PIPE LINE, FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WILL BE PRESERVED.

4. MINIMUM COVER NOT LESS THAN 5-1/2 FEET. PIPE TO BE DEEPER THAN 5-1/2 FEET IF NECESSARY TO AVOID CONFLICTS WITH EXISTING AND PROPOSED DRAINAGE OR OTHER UTILITIES.

5. WOOD SHEETING, IF REQUIRED: WHERE SHEETING IS PLACED, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION A MINIMUM OF 18" BELOW STRUCTURAL BOX (SELECT GRAVELS) IF UNDER PAVEMENT, AND 1 FOOT ABOVE THE TOP OF THE PIPE OUTSIDE OF PAVED AREAS.

6. LOCATOR TAPE: TRACER WIRE SHALL BE NO. 10 AWG COPPER WITH TW INSULATION (BLUE IN COLOR). WIRE CONNECTIONS SHALL BE MADE WITH DRYCONN WATERPROOF CONNECTORS FOR DIRECT BURY. TERMINATE TRACER WIRE ABOVE GROUND AT ALL HYDRANTS.

7. W = MAXIMUM ALLOWABLE TRENCH PAYMENT WIDTH: FOR ROCK EXCAVATION, FOR ORDERED EXCAVATION BELOW GRADE AND HANDLING OF EXCAVATED COMTAMINATED SOILS. FOR PIPES 12" INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 12" INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE DIAMETER.



3/99 GATE VALVE AND VALVE BOX
NOT TO SCALE

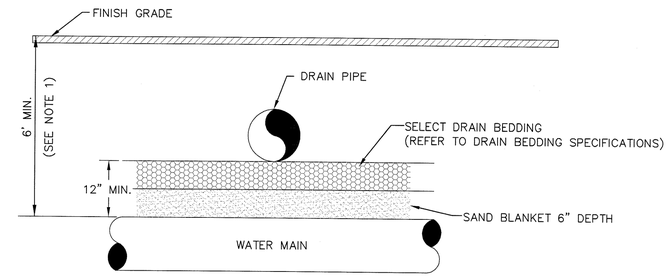
LIMITS OF RESTRAINED JOINTS	
FITTINGS	MIN. LINEAR FEET TO BE RESTRAINED
12"-45° BEND	12 (EACH SIDE OF FITTING)
12"-22½° BEND	8 (EACH SIDE OF FITTING)
12"-11¼° BEND	8 (EACH SIDE OF FITTING)
12"X 6" TEE	FULLY RESTRAINED ALONG BRANCH
12"X 8" TEE	FULLY RESTRAINED ALONG BRANCH
12" DEAD END	40 (ALONG BRANCH)

BASIS: IN ACCORDANCE WITH THRUST RESISTANT DESIGN FOR DUCTILE IRON PIPE (4TH ED-1997) BY DIPRA. DESIGN BASIS: LAY CONDITION 4, GOOD SAND, DESIGN PRESSURE 140 PSI, SAFETY FACTOR 1.5.

NOTE:

A MINIMUM OF ONE JOINT SHALL BE RESTRAINED ON EACH SIDE OF FITTING AND ALONG BRANCH OF TEE.

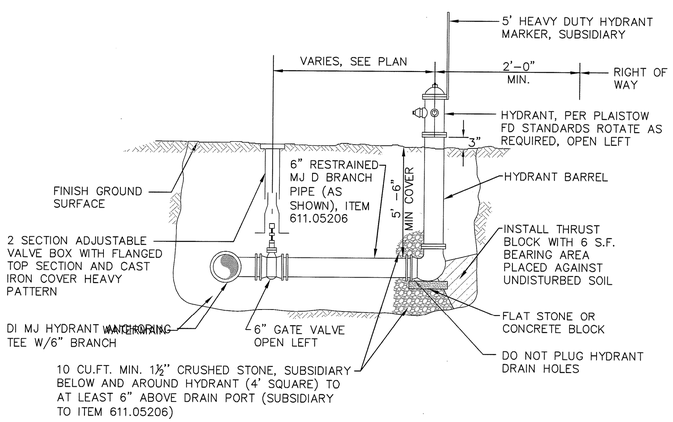
4/99 THRUST AND RESTRAINT DETAILS
NOT TO SCALE



NOTES:

1. CONSTRUCT WATER MAIN WITH A MINIMUM OF 6' OF COVER AND A MINIMUM OF 12" SEPARATION AT ALL DRAIN CROSSINGS.

6/99 WATER/DRAIN CROSSING
NOT TO SCALE

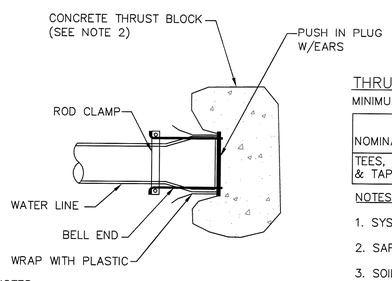


NOTES:

1. CARE SHALL BE TAKEN TO ASSURE THAT CONCRETE DOES NOT PLUG DRAIN PORTS.

2. HYDRANT ASSEMBLY INCLUDES ANCHORING TEE, 6" GV, AND HYDRANT. BRANCH PIPING, IF REQUIRED, WILL BE PAID UNDER ITEM 611.05206.

2/99 HYDRANT ASSEMBLY (ITEM 611.81)
NOT TO SCALE



THRUST BLOCK SCHEDULE

MINIMUM BEARING AREA (SQUARE FEET)

	PIPE SIZE		
NOMINAL DIA. (IN)	6"	8"	12"
TEES, CAPS, PLUGS, & TAPPING SLEEVES	3.25	7.92	12.81

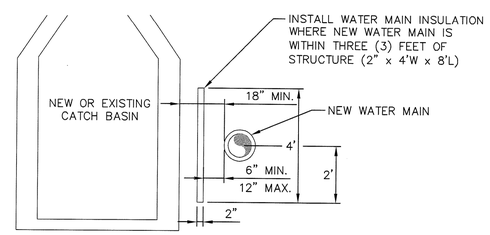
NOTES:

1. SYSTEM PRESSURE: 140 PSI
2. SAFETY FACTOR: 1.5
3. SOIL BEARING CAPACITY: 2,000 PSF

NOTES:

1. JOINT RESTRAINT IN ACCORDANCE WITH AWWA REQUIREMENTS.
2. SEE THRUST BLOCK SCHEDULE FOR DIMENSIONS.

5/99 TYPICAL END CAP AND THRUST RESTRAINT
NOT TO SCALE



7/99 INSULATION AT CATCH BASIN DETAIL
NOT TO SCALE

(ITEM 611.9512)

NUMBER	DATE	STATION	STATION	STATE	DESCRIPTION
REVISIONS AFTER PROPOSAL					

	DATE
SDR PROCESSED	
NEW DESIGN	
SHEET CHECKED	
AS BUILT DETAILS	

STATE OF NEW HAMPSHIRE PHILIP D. MacDONALD No. 7842 LICENSED PROFESSIONAL ENGINEER

Drawn/Chk RMG
Designed FGU
Checked PDM
Approved –
Date 09/02/2015
Book No. –
Project No. 1643
Dwg. ID 1643DETAILS
Scale AS-SHOWN

UNDERWOOD engineers
25 Vaughan Mall, Portsmouth, N.H. 03801
Tel. 603-436-6192 Fax. 603-431-4733

DATE	REVISIONS	APP'D

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
WATER IMPROVEMENTS-PLAN
NEW HAMPSHIRE RTE 125
PLAISTOW-EAST ROAD TO OLD ROAD

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
	10044G	99	179

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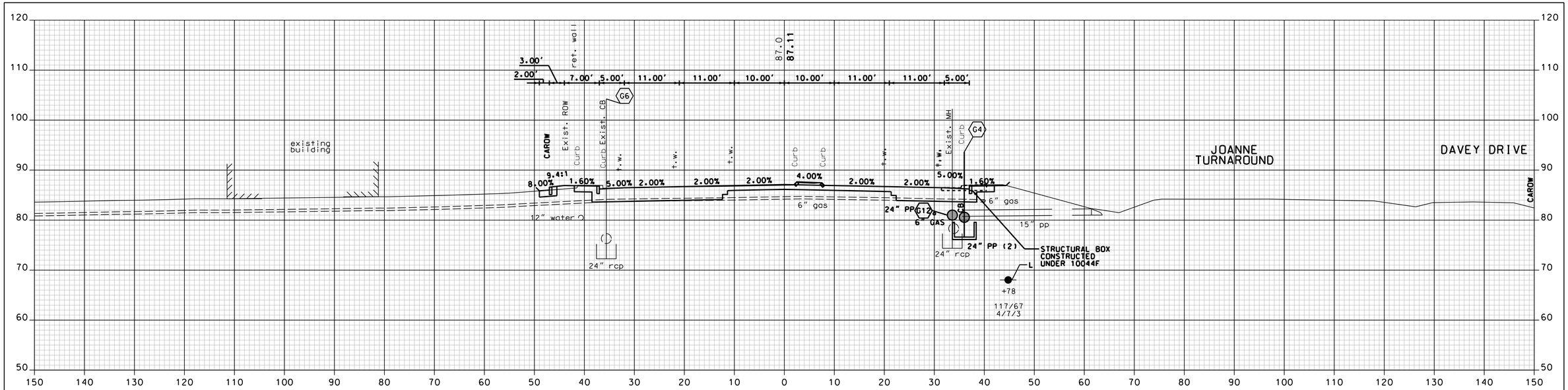

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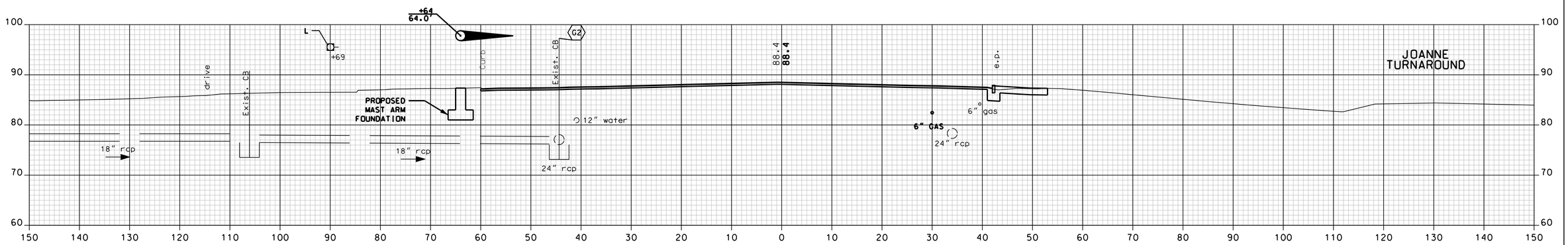

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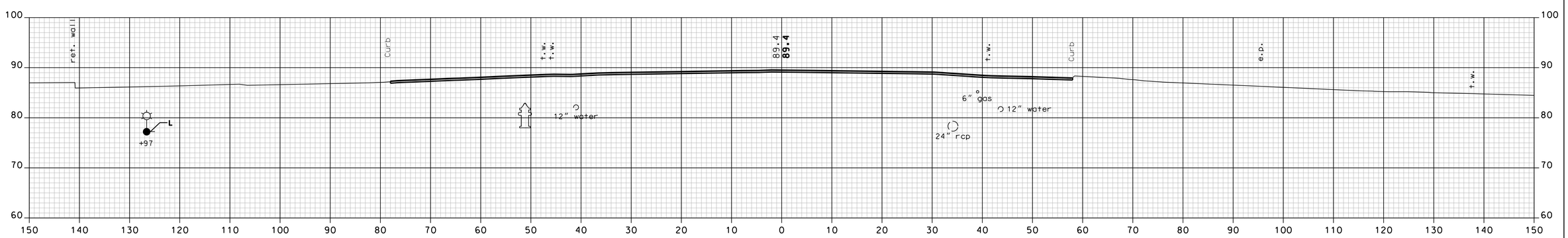


1232+00

NOTE: SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION

NH ROUTE 125

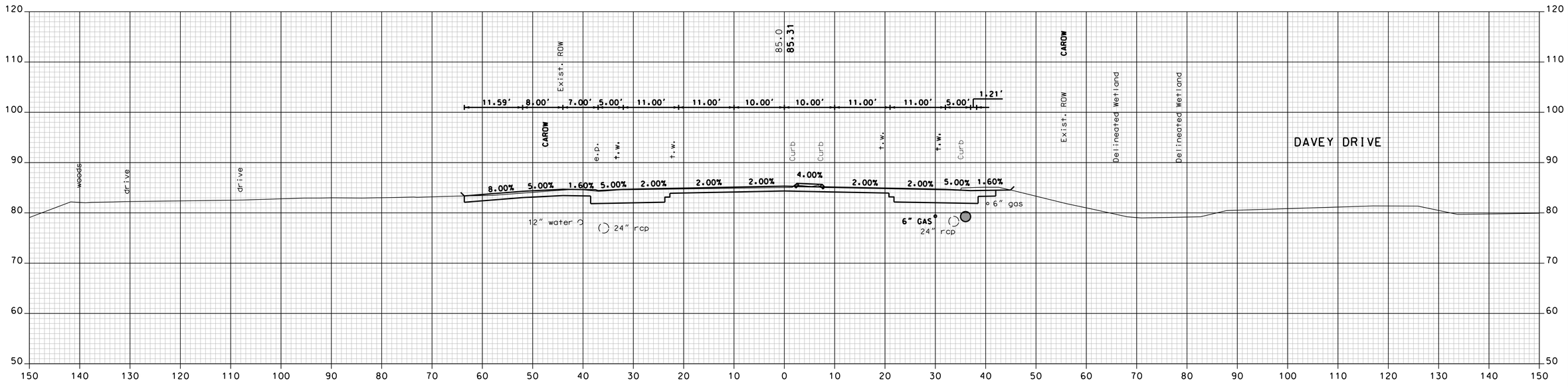
Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	419.7 C.Y.	ROCK EXCAV.	– C.Y.
FILL	6.1 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	100	179

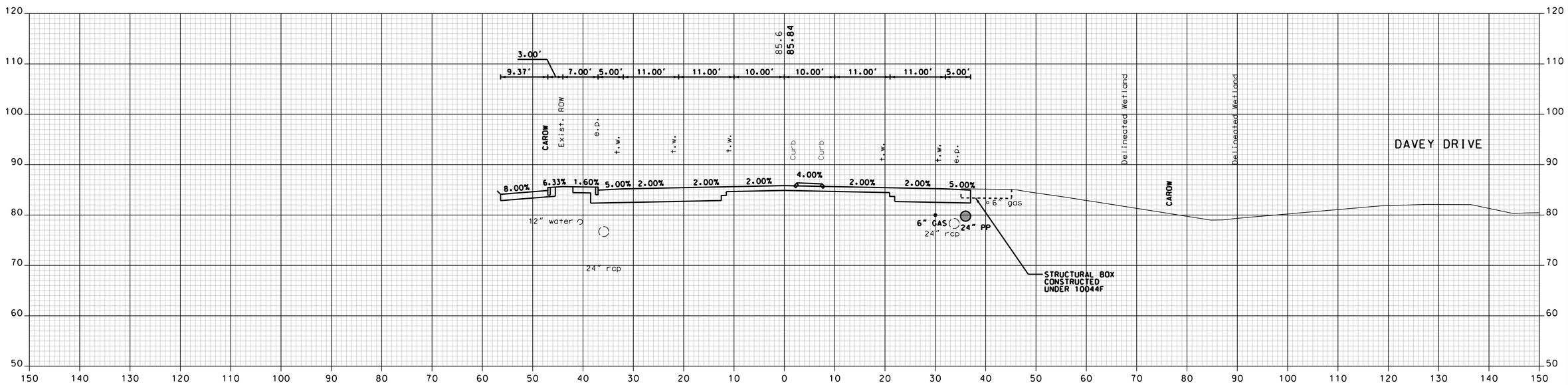
REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



DRIVE LT

1233+71



1233+50

NOTE: SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

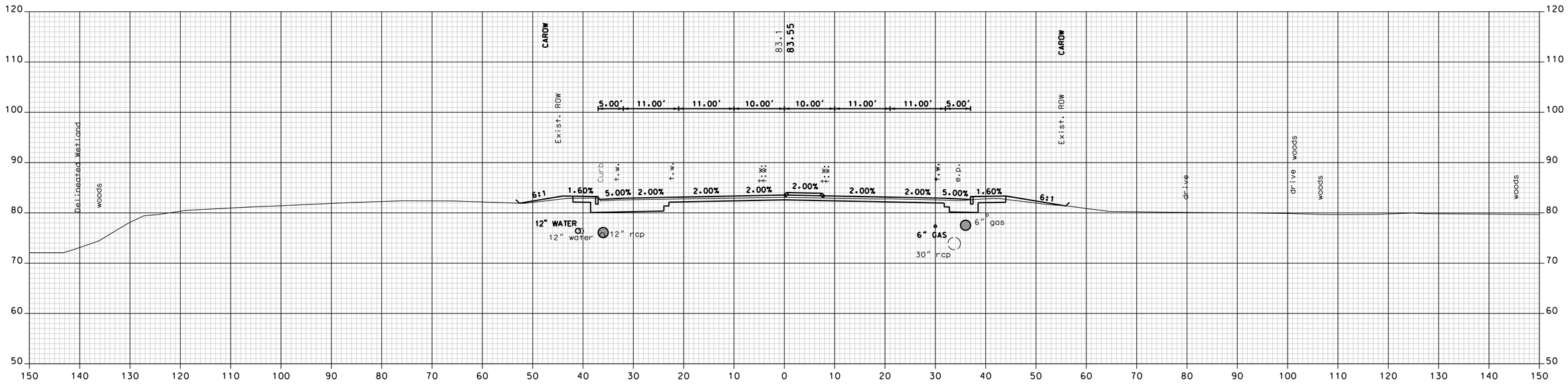
SHEET TOTALS			
COMMON EXCAV.	228.3 C.Y.	ROCK EXCAV.	– C.Y.
FILL	4.6 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	101	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



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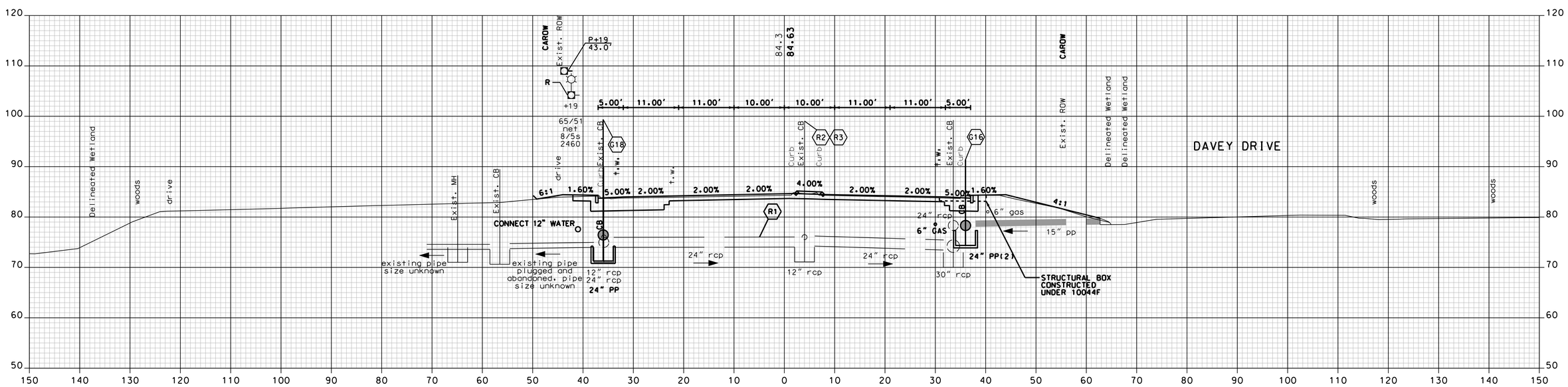

1234+00

NOTE: SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	328.8 C.Y.	ROCK EXCAV.	– C.Y.
FILL	23.7 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	102	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
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REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

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SHEET CHECKED	A. GRANDE	DATE 8/2015
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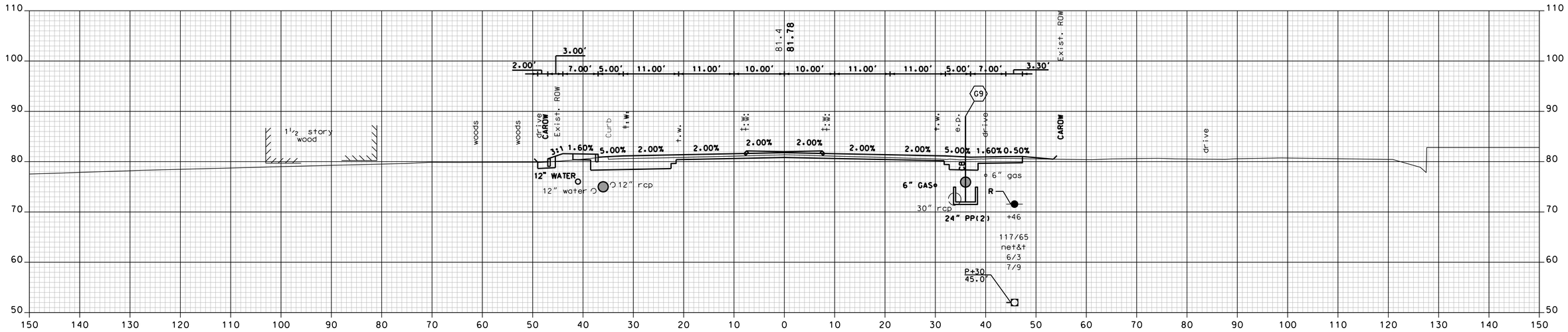
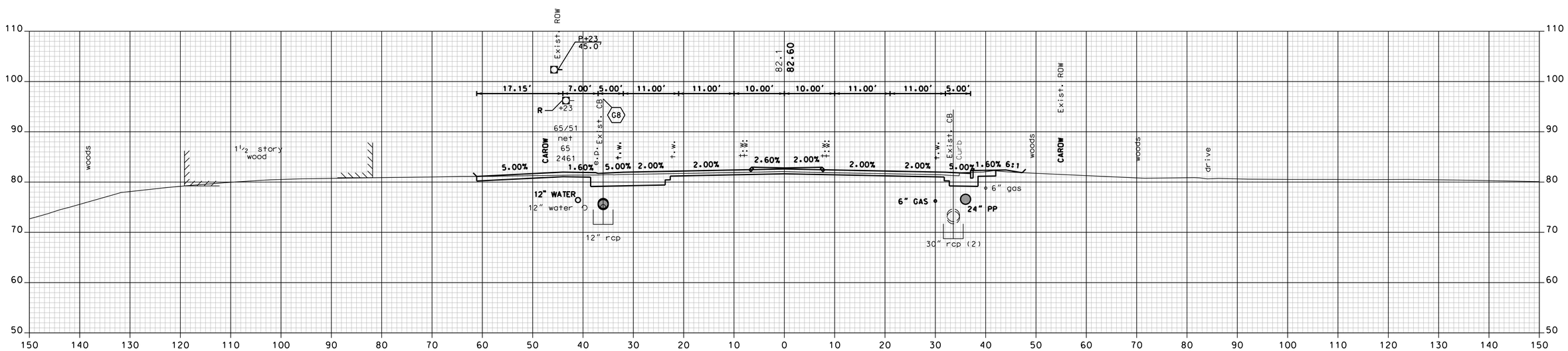


1235+50



NOTE: SEE SOIL AND GROUNDWATER MANAGEMENT PLAN FOR INFORMATION RELATED TO SOIL AND GROUNDWATER CONTAMINATION

DRIVE LT

1235+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

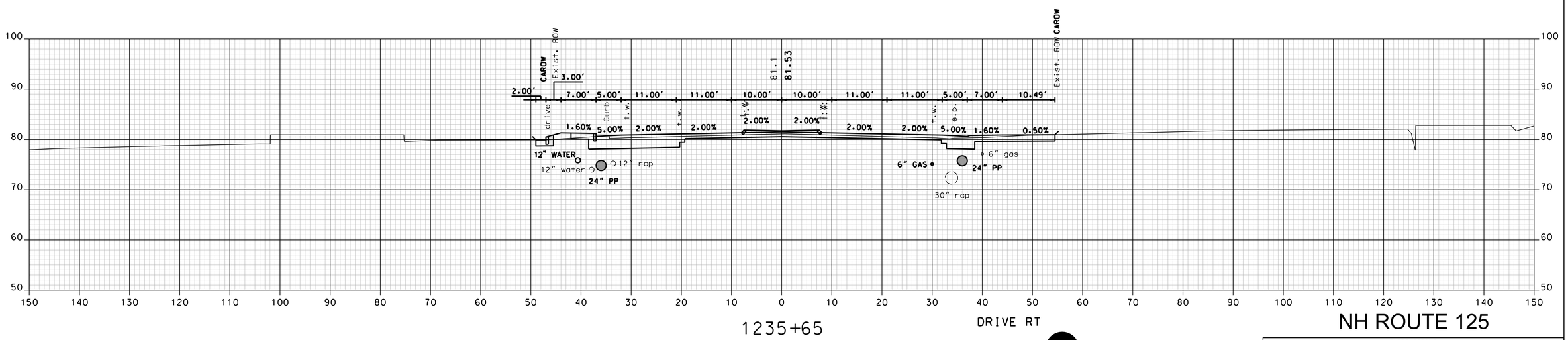
COMMON EXCAV.	296.0 C.Y.	ROCK EXCAV.	– C.Y.
FILL	16.9 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	103	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



1235+65

DRIVE RT

NH ROUTE 125

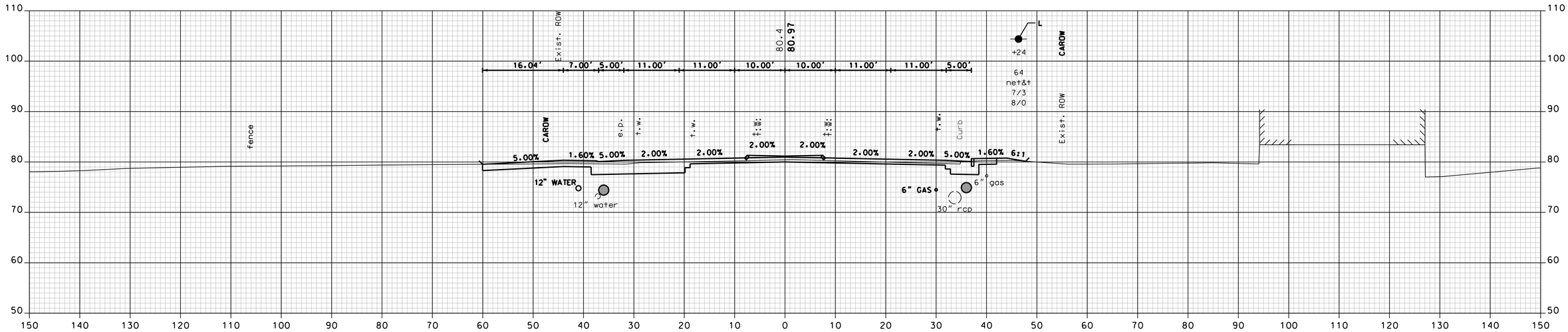
VHB Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 104.0 C.Y. ROCK EXCAV. – C.Y.

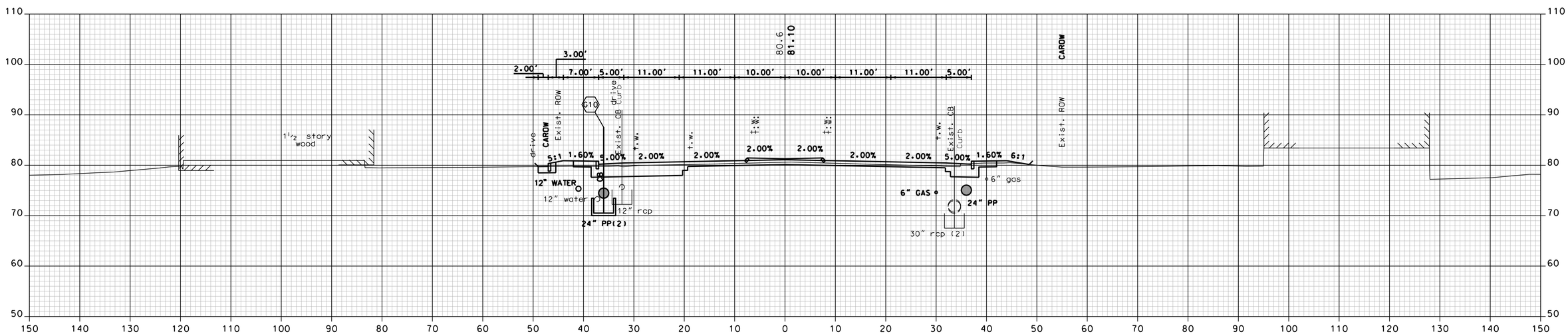
FILL 5.9 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	104	179



DRIVE LT

1236+11



1236+00

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

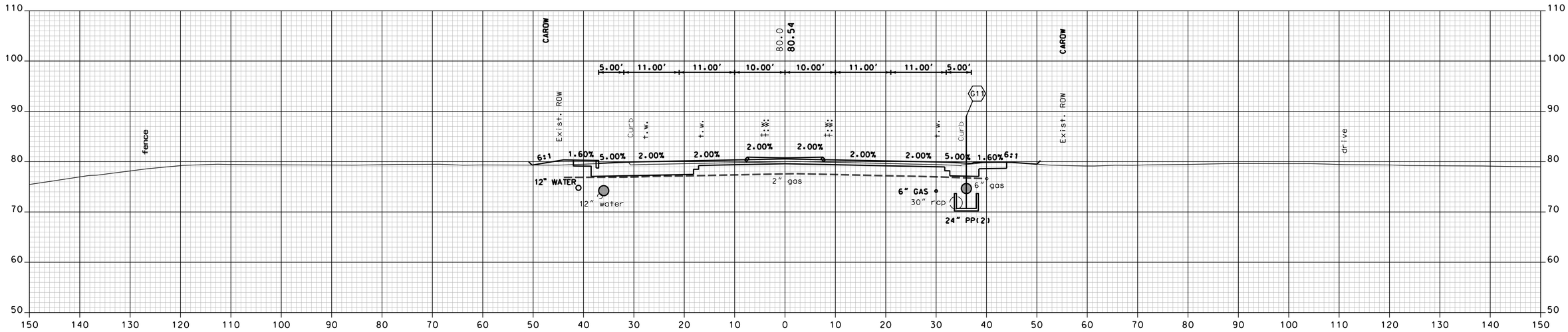
SHEET TOTALS			
COMMON EXCAV.	108.9 C.Y.	ROCK EXCAV.	– C.Y.
FILL	4.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	105	179

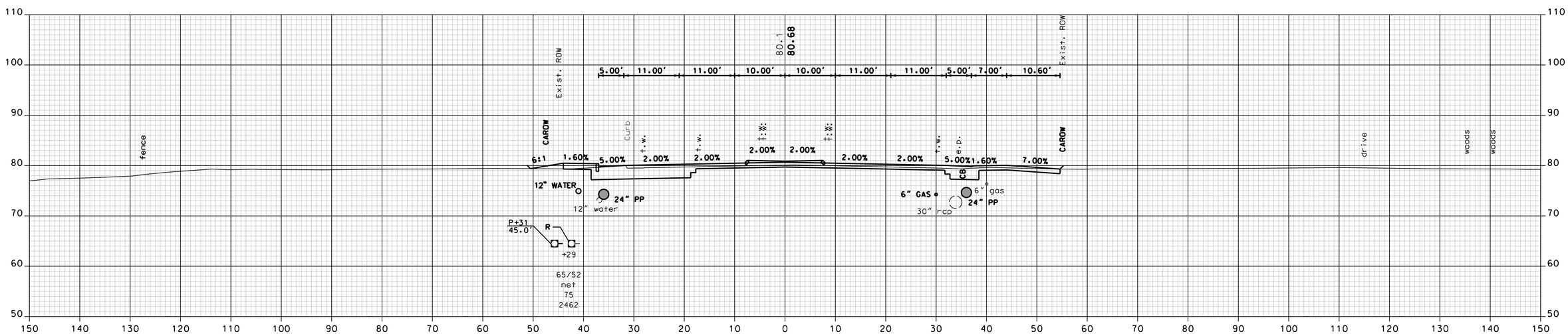
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE



1236+50



1236+37 DRIVE RT

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

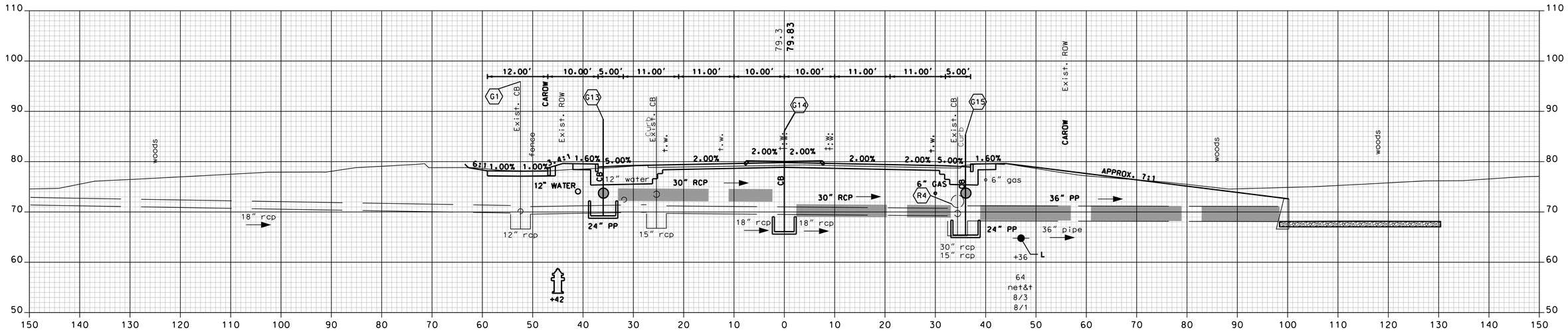
SHEET TOTALS			
COMMON EXCAV.	209.8 C.Y.	ROCK EXCAV.	– C.Y.
FILL	7.5 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	106	179

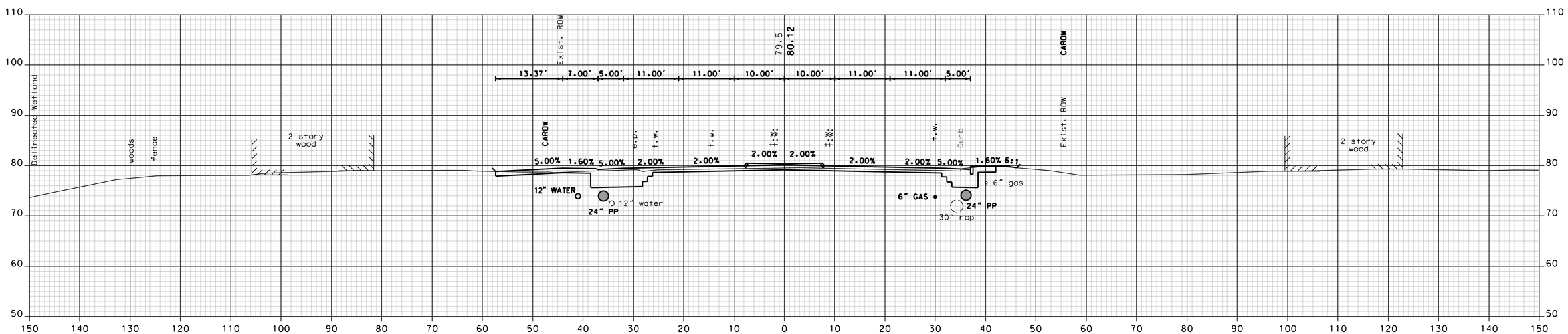
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



1237+50



DRIVE LT

1237+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

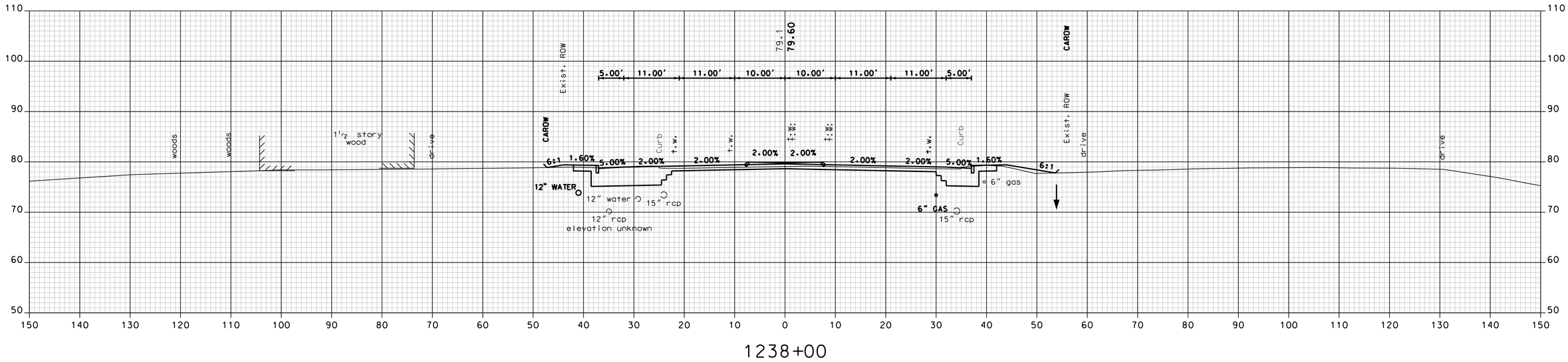
SHEET TOTALS			
COMMON EXCAV.	289.9 C.Y.	ROCK EXCAV.	– C.Y.
FILL	115.8 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	107	179

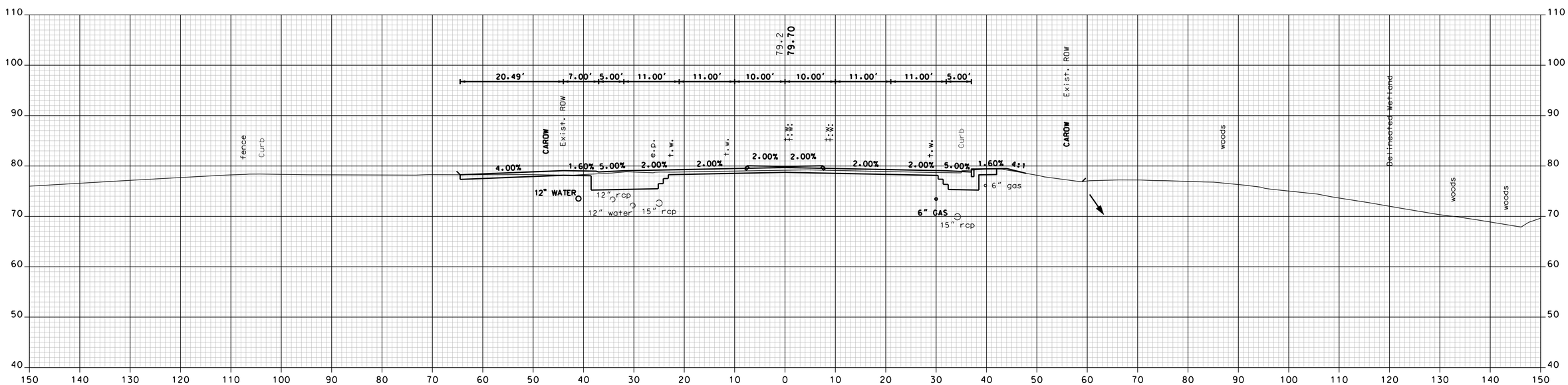
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



1238+00



DRIVE LT

1237+79

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	312.4 C.Y.	ROCK EXCAV.	– C.Y.
FILL	10.3 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	108	179

REVISIONS AFTER PROPOSAL

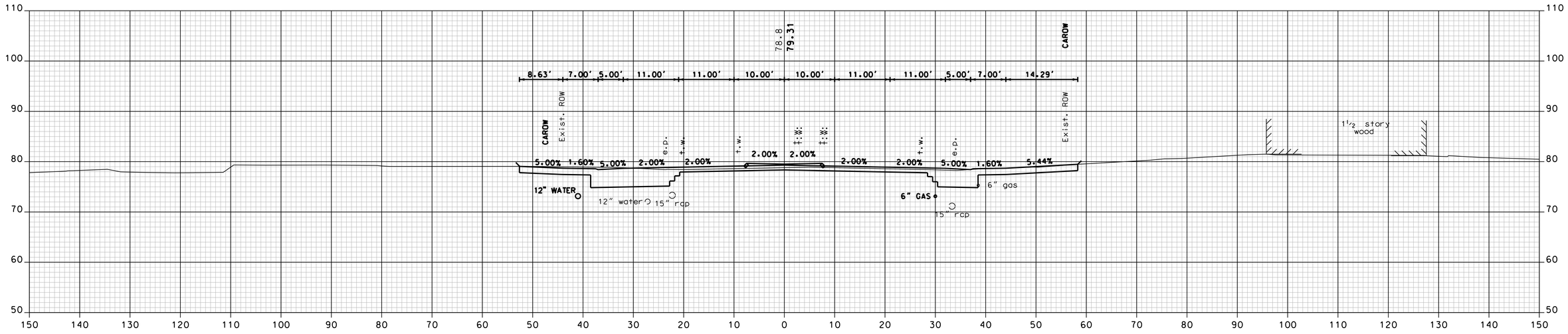
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

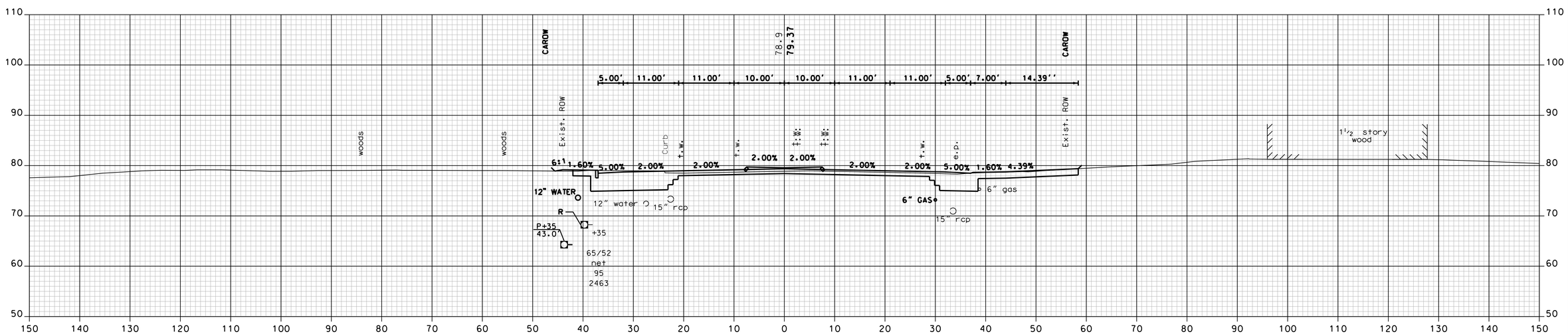
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



DRIVE LT 1238+63 DRIVE RT



1238+50

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

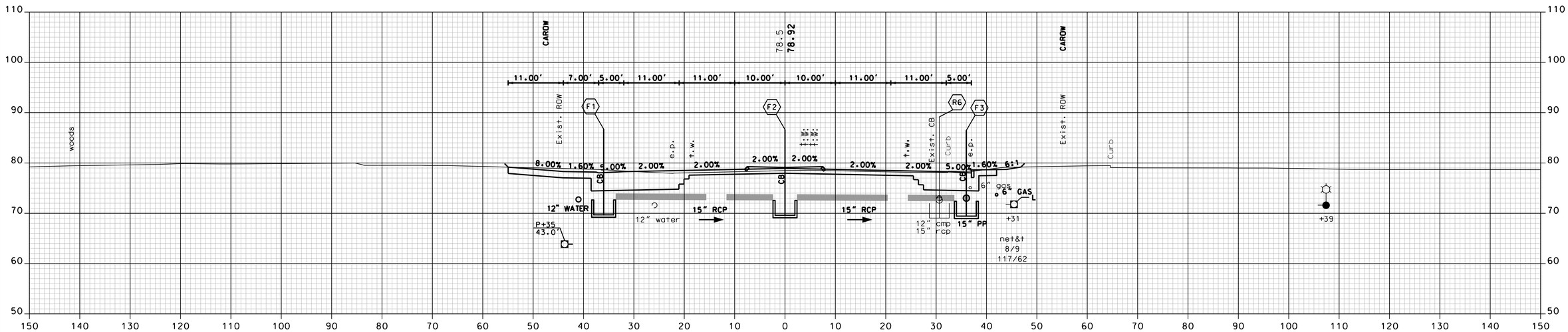
SHEET TOTALS

COMMON EXCAV.	241.1 C.Y.	ROCK EXCAV.	– C.Y.
FILL	2.4 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	109	179

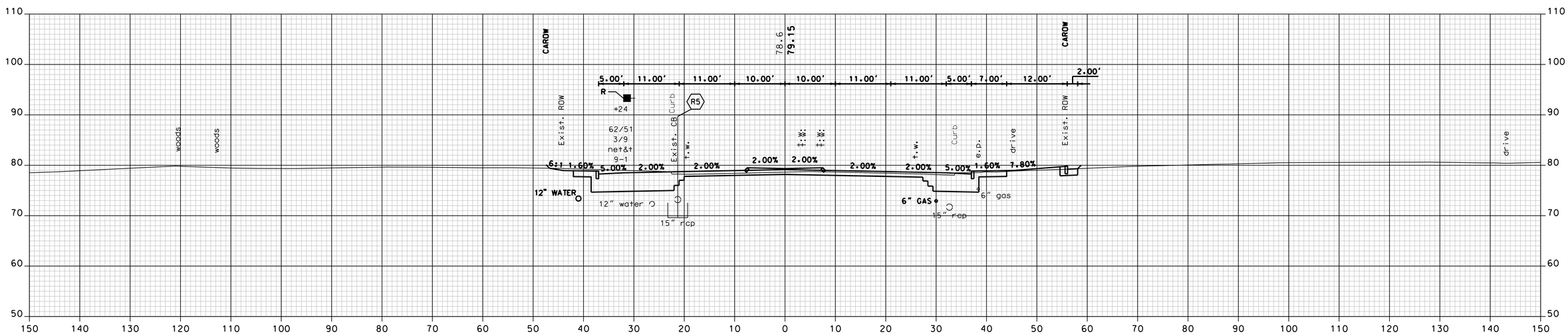
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



DRIVE LT

1239+50



1239+00

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

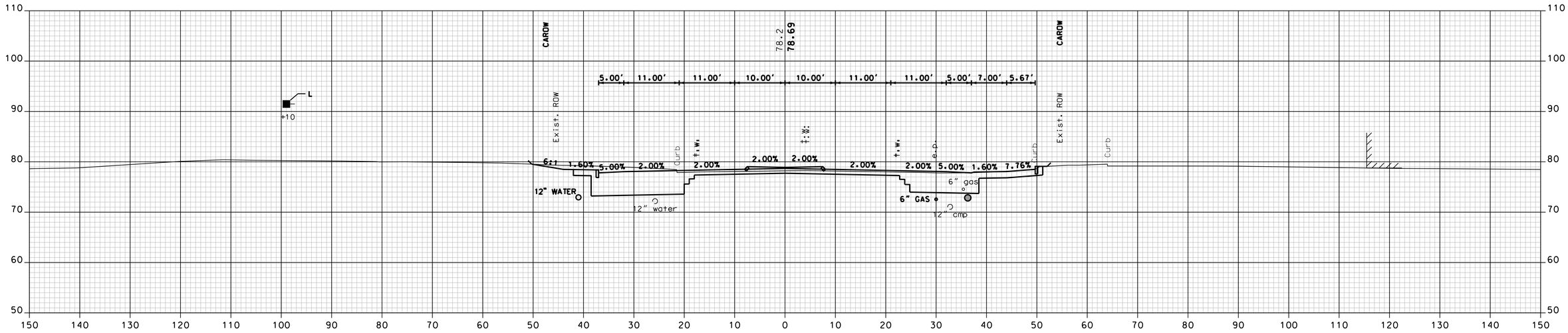
SHEET TOTALS			
COMMON EXCAV.	464.5 C.Y.	ROCK EXCAV.	– C.Y.
FILL	3.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	110	179

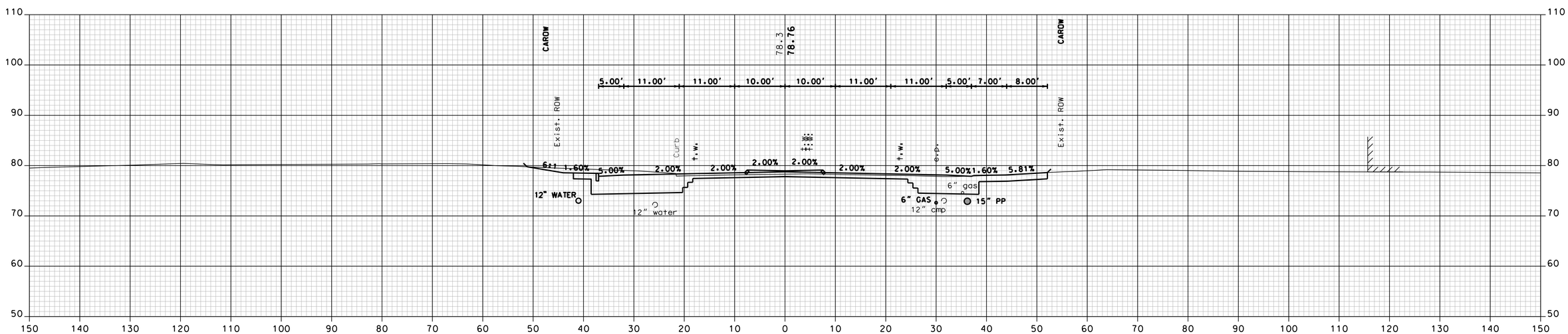
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



1240+00



1239+84

DRIVE RT

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

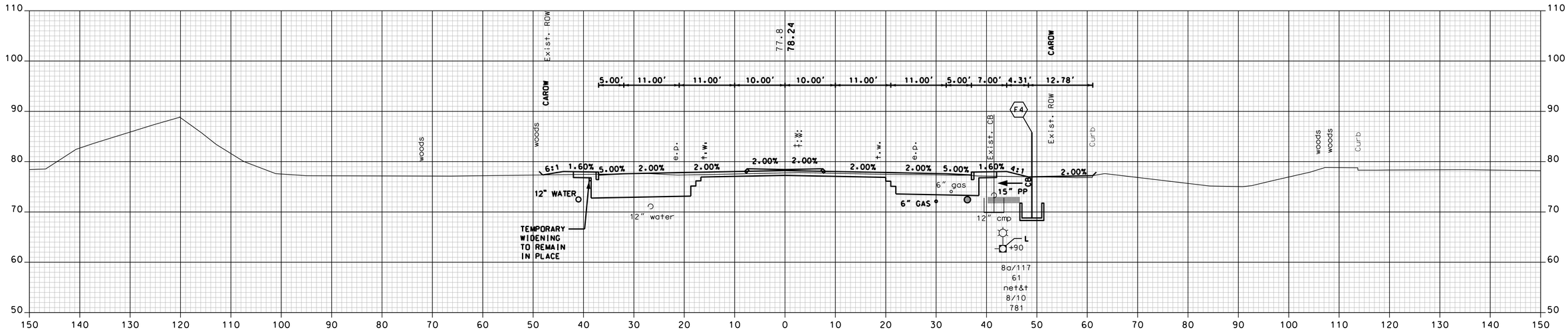
SHEET TOTALS			
COMMON EXCAV.	479.4 C.Y.	ROCK EXCAV.	– C.Y.
FILL	0.1 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	111	179

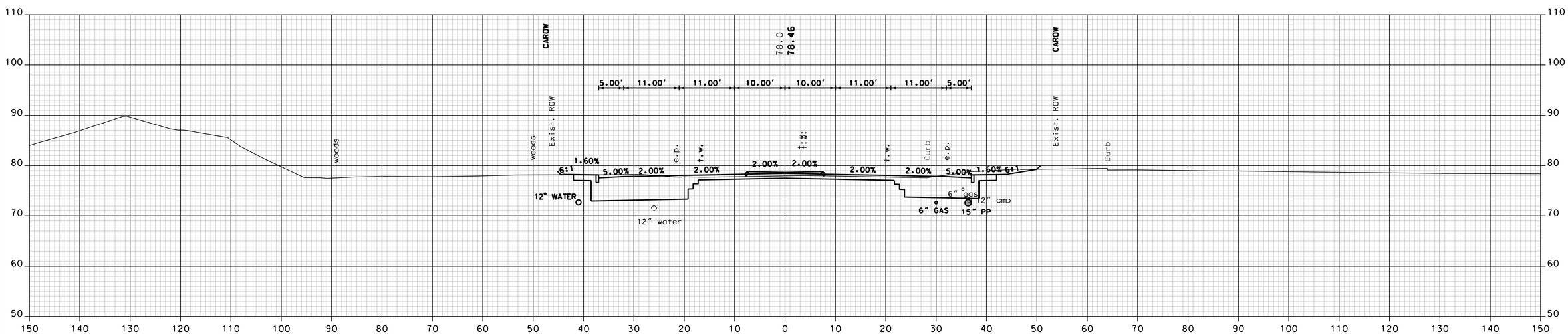
		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



1241+00



1240+50

NH ROUTE 125

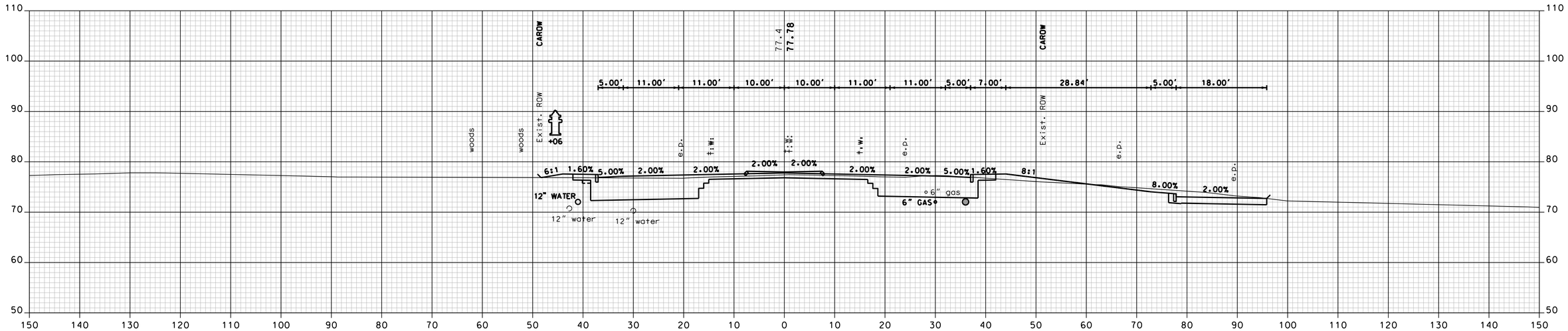
SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

VHB Vanasse Hangen Brustlin, Inc.

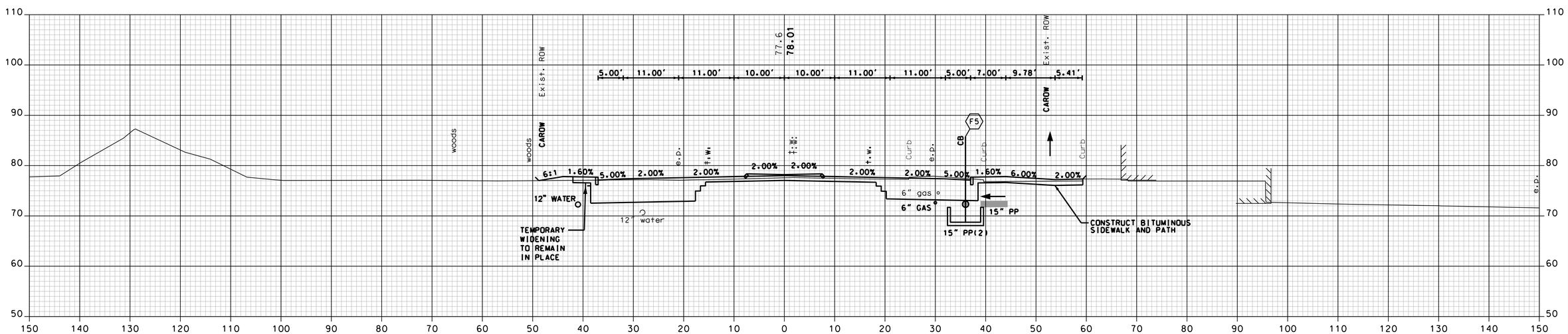
SHEET TOTALS

COMMON EXCAV.	727.6 C.Y.	ROCK EXCAV.	– C.Y.
FILL	19.4 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	112	179



1242+00



1241+50

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	687.0 C.Y.	ROCK EXCAV.	– C.Y.
FILL	26.3 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	113	179

REVISIONS AFTER PROPOSAL

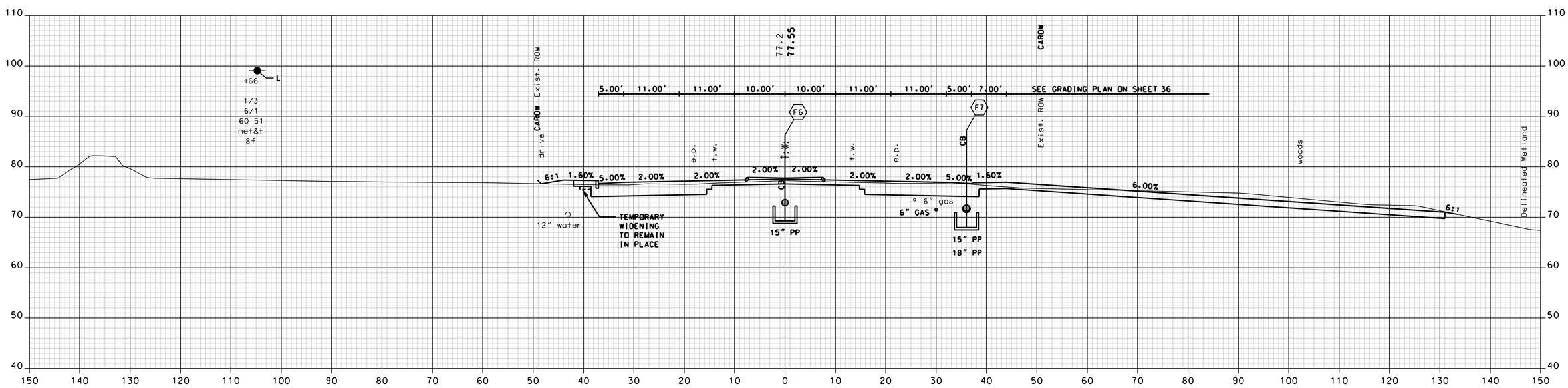
NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



1242+50

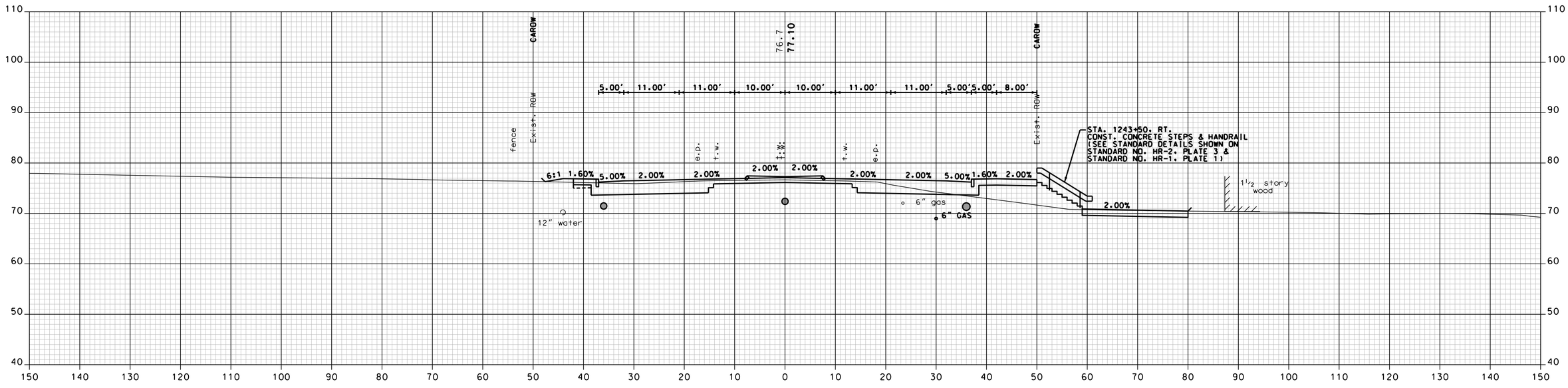
DRIVE RT

NH ROUTE 125

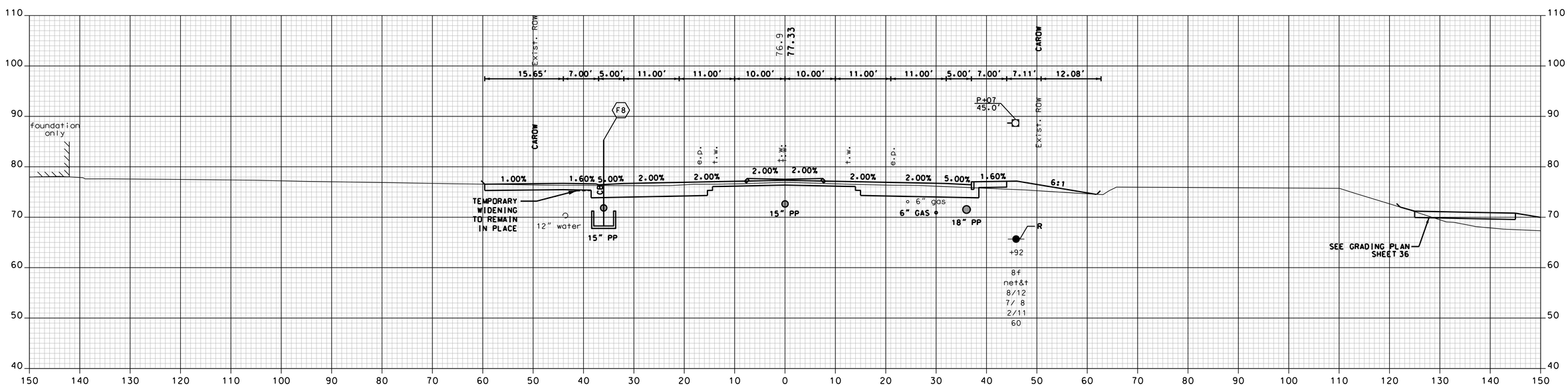
VHB Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	226.2 C.Y.	ROCK EXCAV.	– C.Y.
FILL	19.6 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	114	179



1243+50



DRIVE LT

1243+00

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

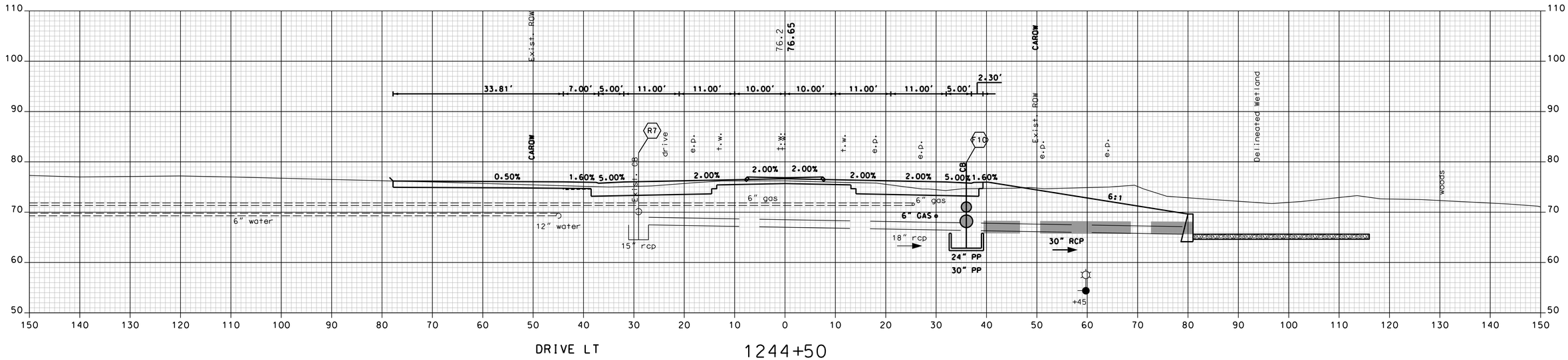
SHEET TOTALS			
COMMON EXCAV.	388.1 C.Y.	ROCK EXCAV.	– C.Y.
FILL	240.5 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	115	179

REVISIONS AFTER PROPOSAL

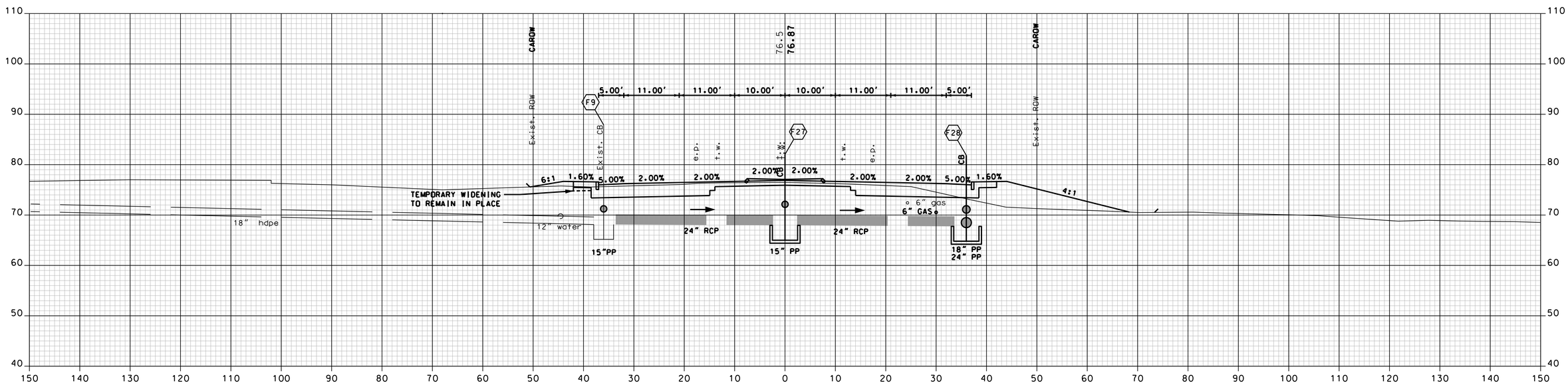
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



DRIVE LT

1244+50



1244+00

NOTE: STA. 1244+00 TO 1246+00. LT
THE EXISTING DETAIL IS A BEST REPRESENTATION
OF THE PRESENT FIELD CONDITIONS BASED ON THE
APPROVED JANUARY 18, 2012 SITE PLANS FOR PARCEL 110.

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

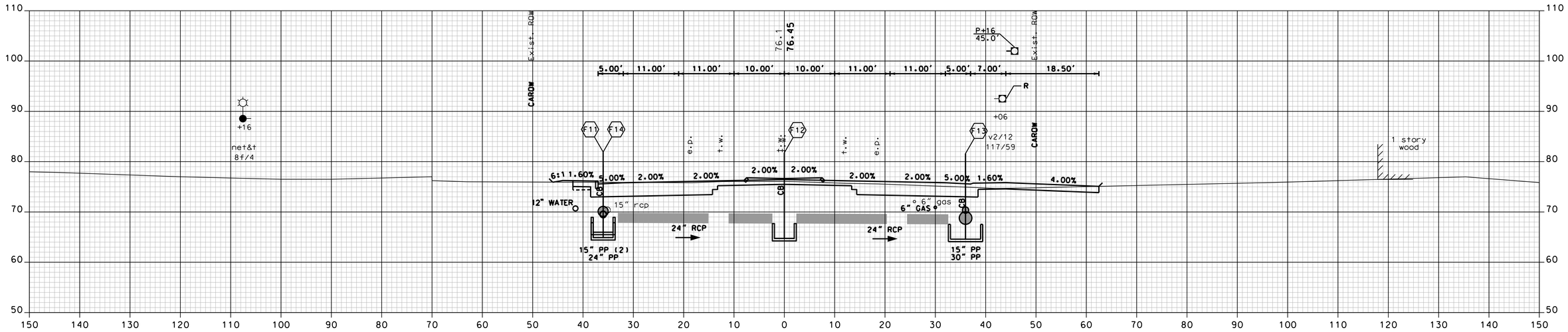
SHEET TOTALS			
COMMON EXCAV.	303.9 C.Y.	ROCK EXCAV.	– C.Y.
FILL	91.7 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	116	179

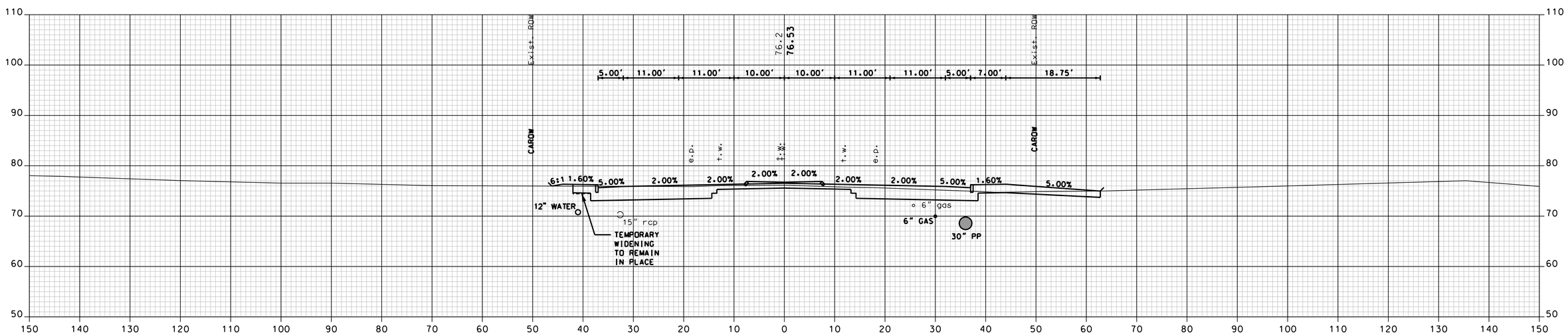
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE



1245+00



1244+75 DRIVE RT

NOTE: STA. 1244+00 TO 1246+00, LT
THE EXISTING DETAIL IS A BEST REPRESENTATION
OF THE PRESENT FIELD CONDITIONS BASED ON THE
APPROVED JANUARY 18, 2012 SITE PLANS FOR PARCEL 110.

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	367.7 C.Y.	ROCK EXCAV.	– C.Y.
FILL	12.6 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	117	179

REVISIONS AFTER PROPOSAL

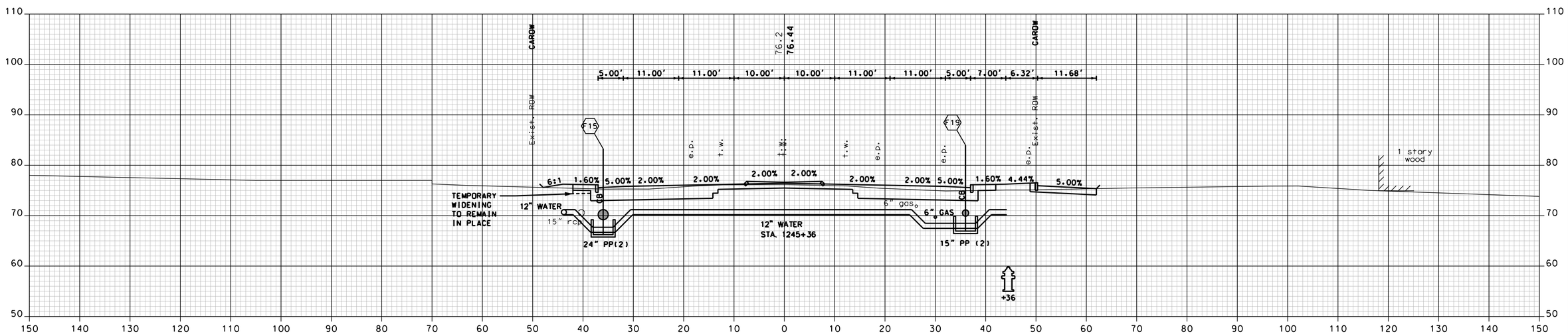
NUMBER	DATE	STATION	STATION	DESCRIPTION

VHB TEAM		DATE
SDR PROCCESSED		7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



NOTE: STA. 1244+00 TO 1246+00. LT
THE EXISTING DETAIL IS A BEST REPRESENTATION
OF THE PRESENT FIELD CONDITIONS BASED ON THE
APPROVED JANUARY 18, 2012 SITE PLANS FOR PARCEL 110.

1245+50

NH ROUTE 125

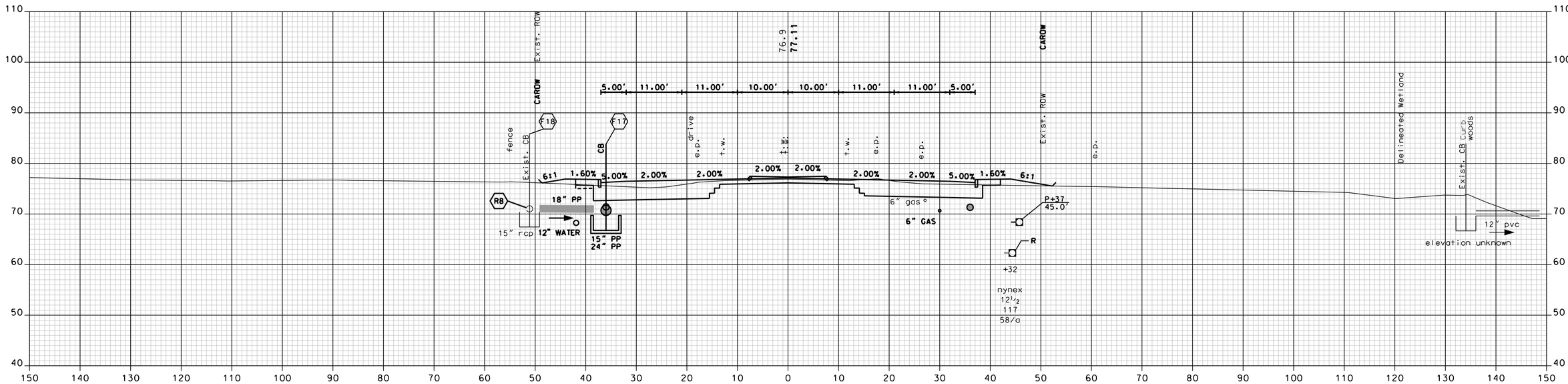
VHB Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	244.1 C.Y.	ROCK EXCAV.	– C.Y.
FILL	12.8 C.Y.	MUCK EXCAV.	– C.Y.

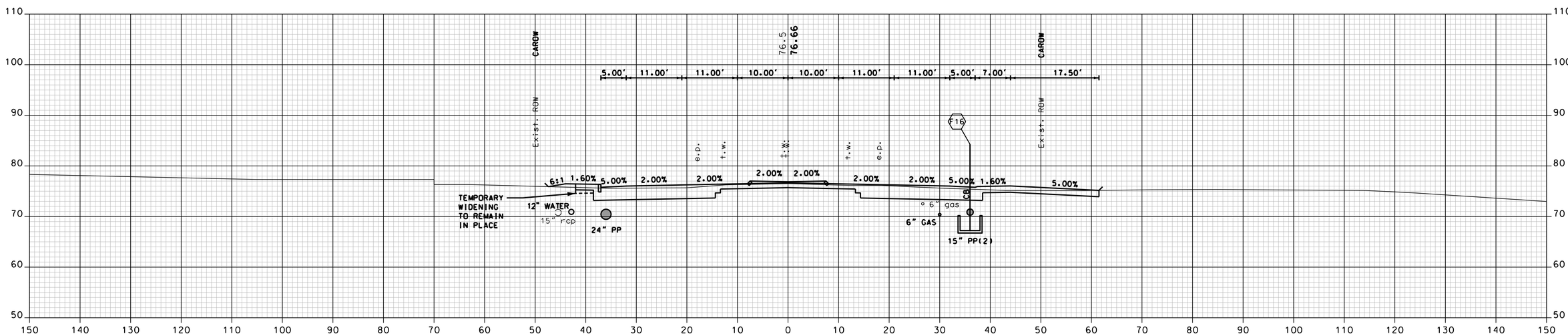
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	118	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



1246+50



1246+00 DRIVE RT

NOTE: STA. 1244+00 TO 1246+00, LT
THE EXISTING DETAIL IS A BEST REPRESENTATION
OF THE PRESENT FIELD CONDITIONS BASED ON THE
APPROVED JANUARY 18, 2012 SITE PLANS FOR PARCEL 110.

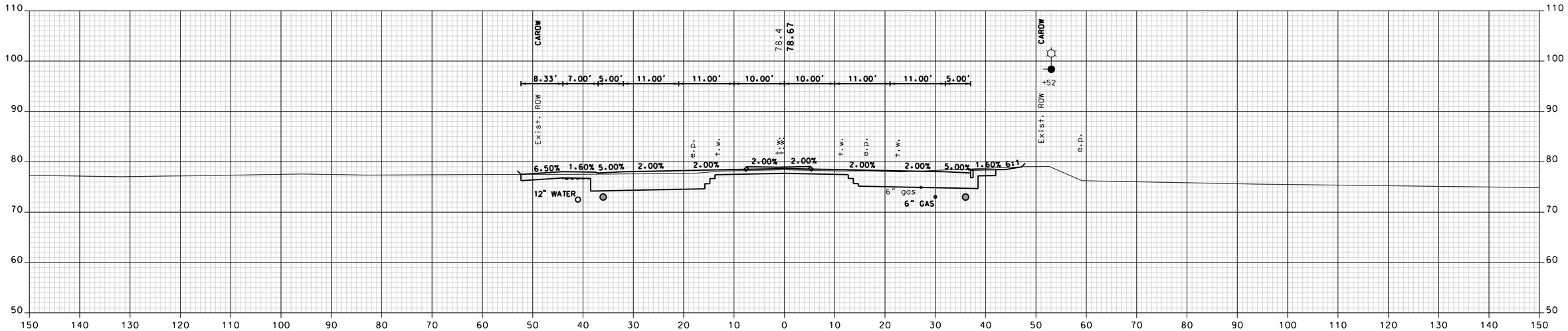
NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	565.9 C.Y.	ROCK EXCAV.	– C.Y.
FILL	37.8 C.Y.	MUCK EXCAV.	– C.Y.

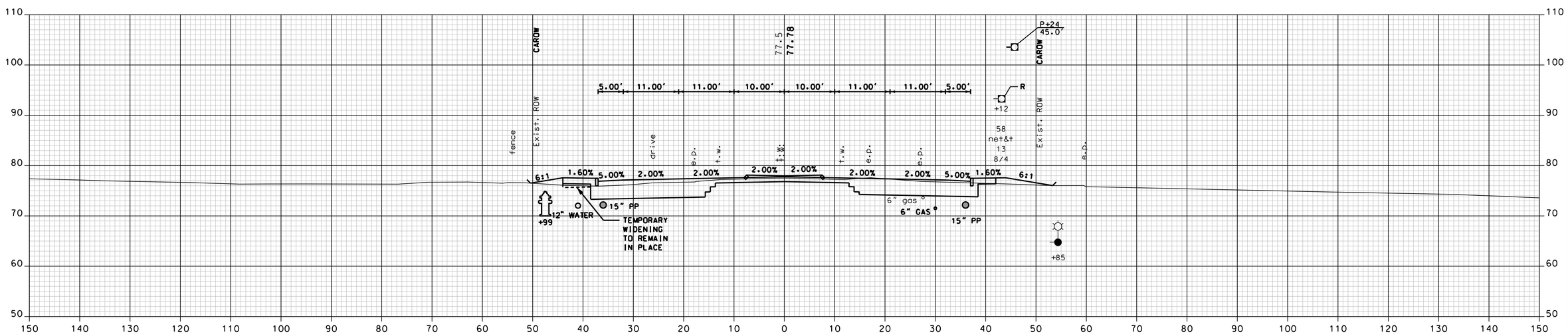
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	119	179

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE



DRIVE LT

1247+50



1247+00

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

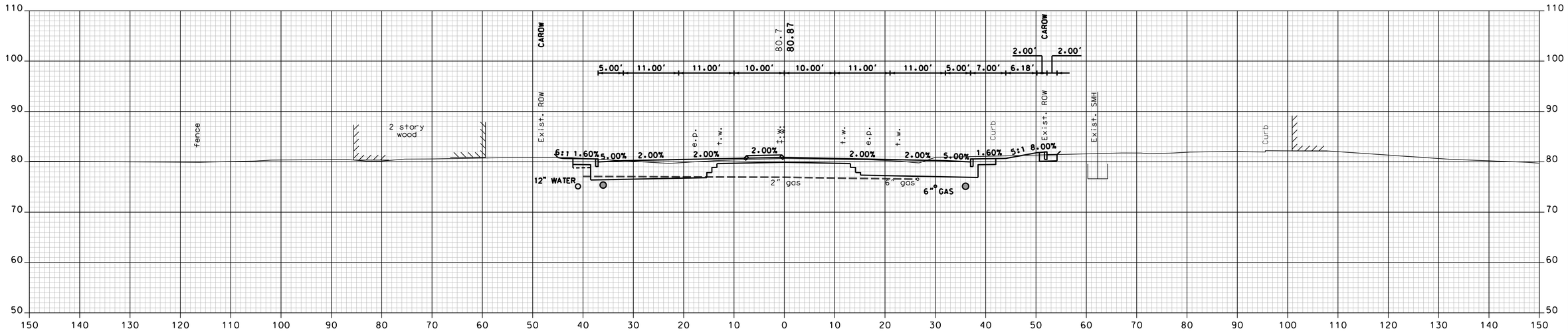
SHEET TOTALS			
COMMON EXCAV.	678.6 C.Y.	ROCK EXCAV.	– C.Y.
FILL	13.6 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	120	179

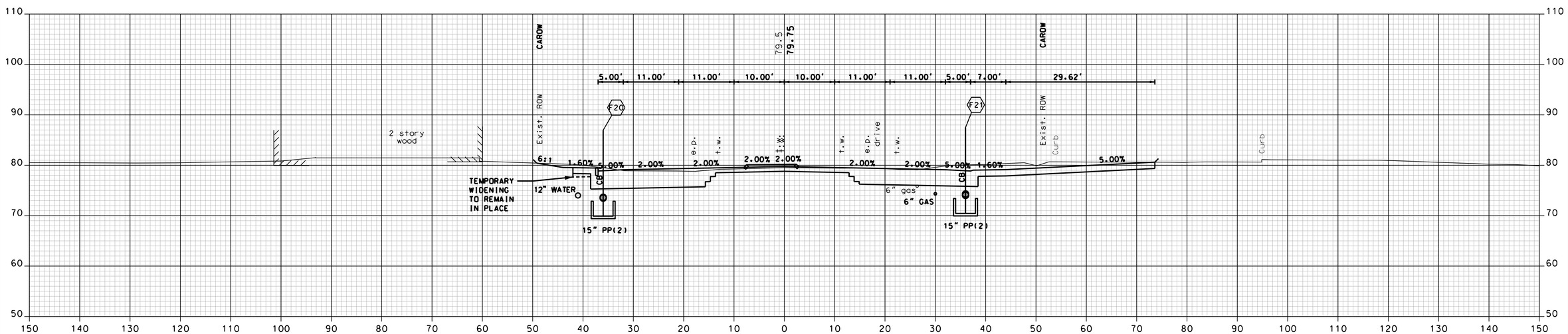
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE



1248+50



1248+00 DRIVE RT

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

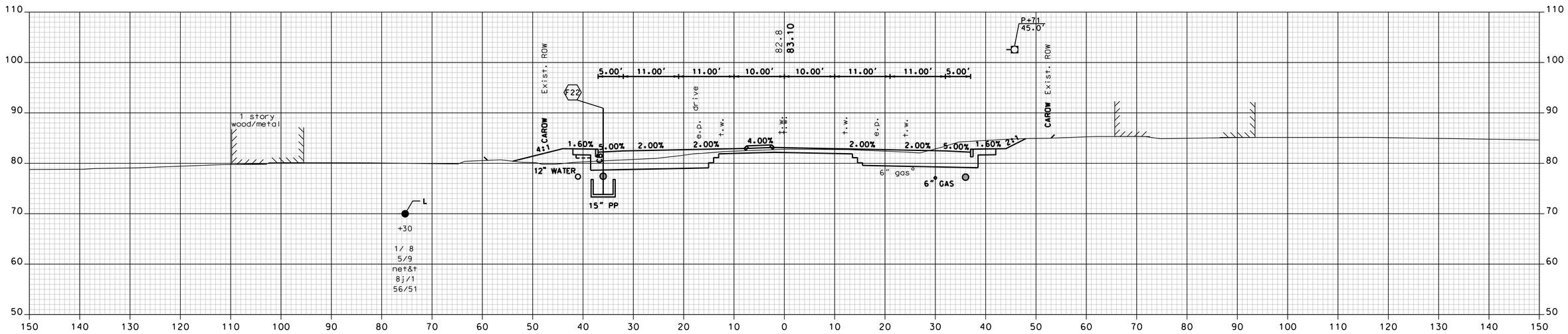
SHEET TOTALS			
COMMON EXCAV.	735.2 C.Y.	ROCK EXCAV.	– C.Y.
FILL	1.7 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	121	179

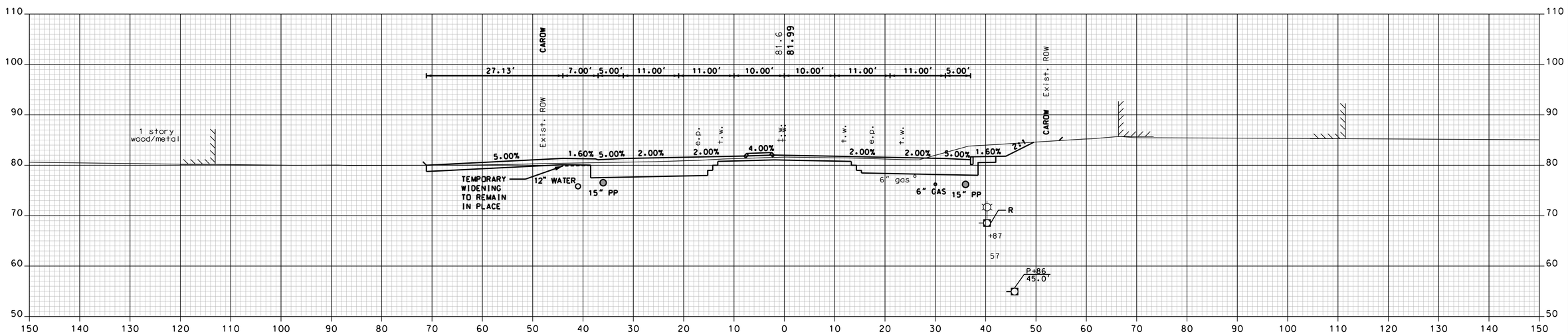
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE



1249+50



DRIVE LT

1249+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

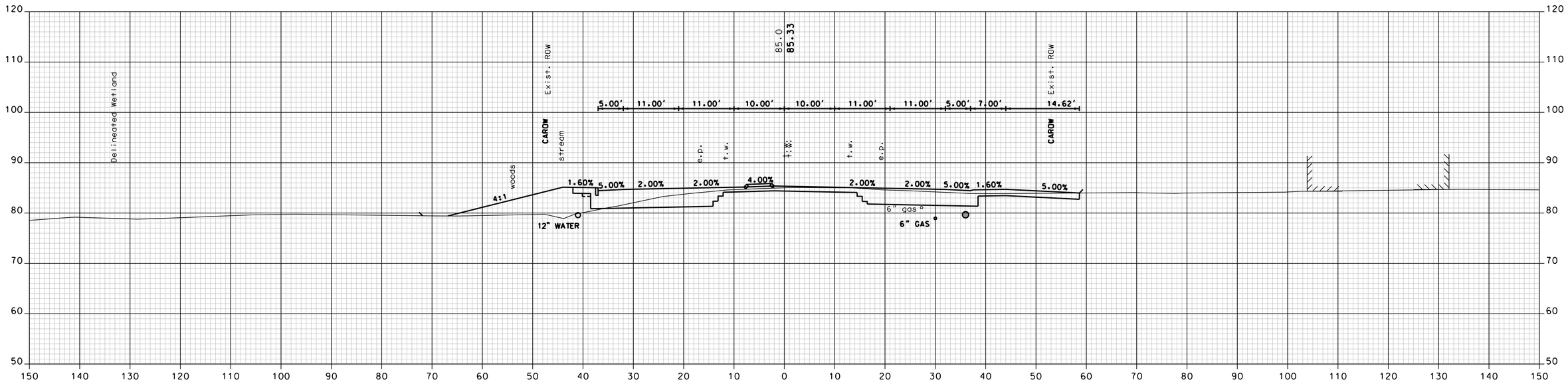
SHEET TOTALS			
COMMON EXCAV.	640.8 C.Y.	ROCK EXCAV.	– C.Y.
FILL	99.8 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	122	179

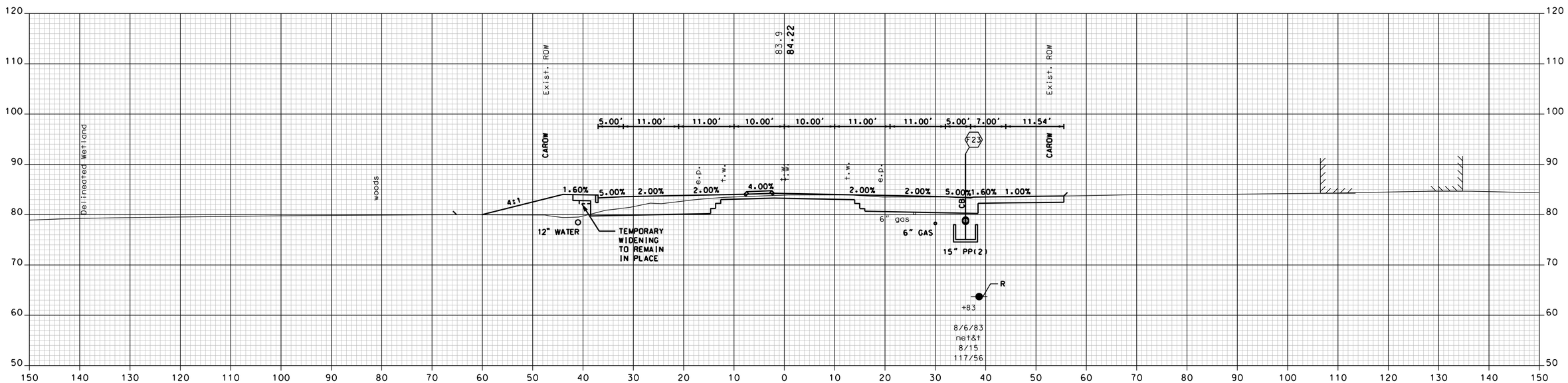
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	



1250+50 DRIVE RT



1250+00 DRIVE RT

NH ROUTE 125

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

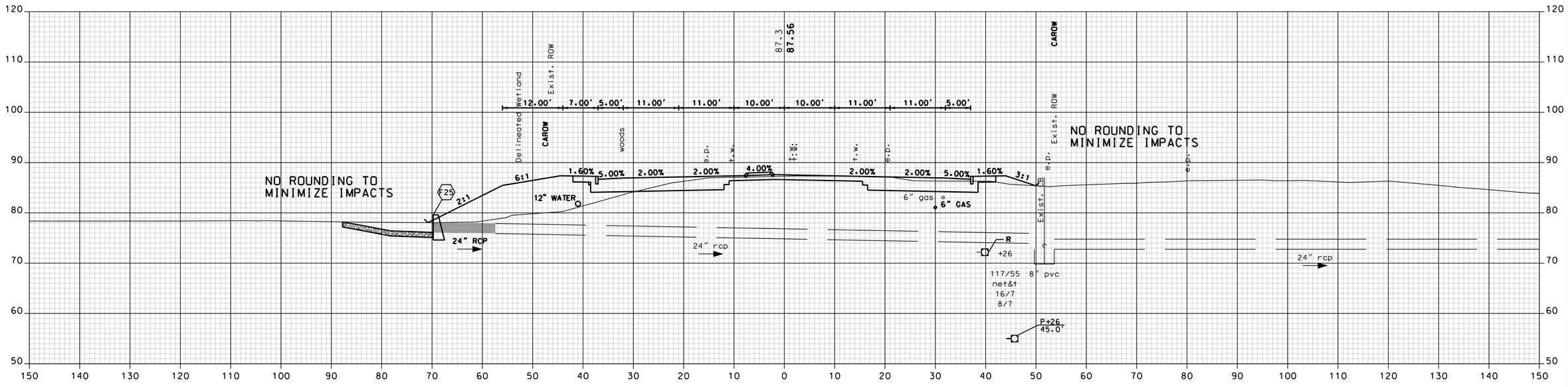
SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

VHB Vanasse Hangen Brustlin, Inc.

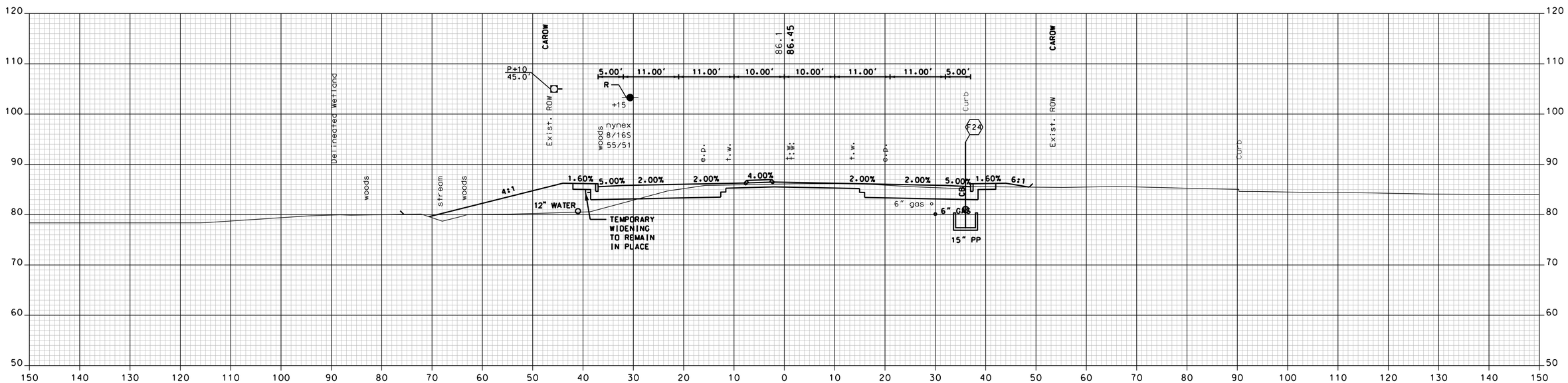
SHEET TOTALS

COMMON EXCAV.	453.3 C.Y.	ROCK EXCAV.	– C.Y.
FILL	327.7 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	123	179



1251+50



1251+00

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

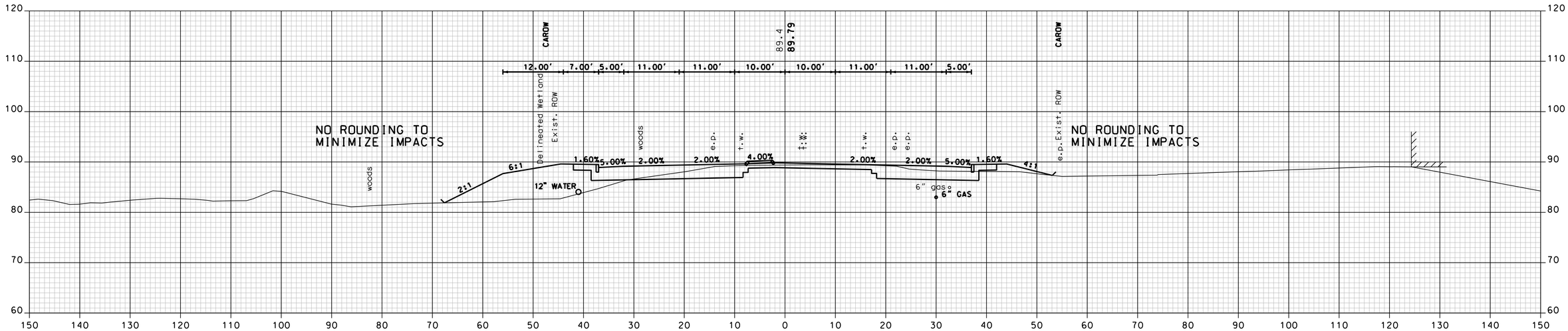
SHEET TOTALS			
COMMON EXCAV.	371.4 C.Y.	ROCK EXCAV.	– C.Y.
FILL	618.6 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	124	179

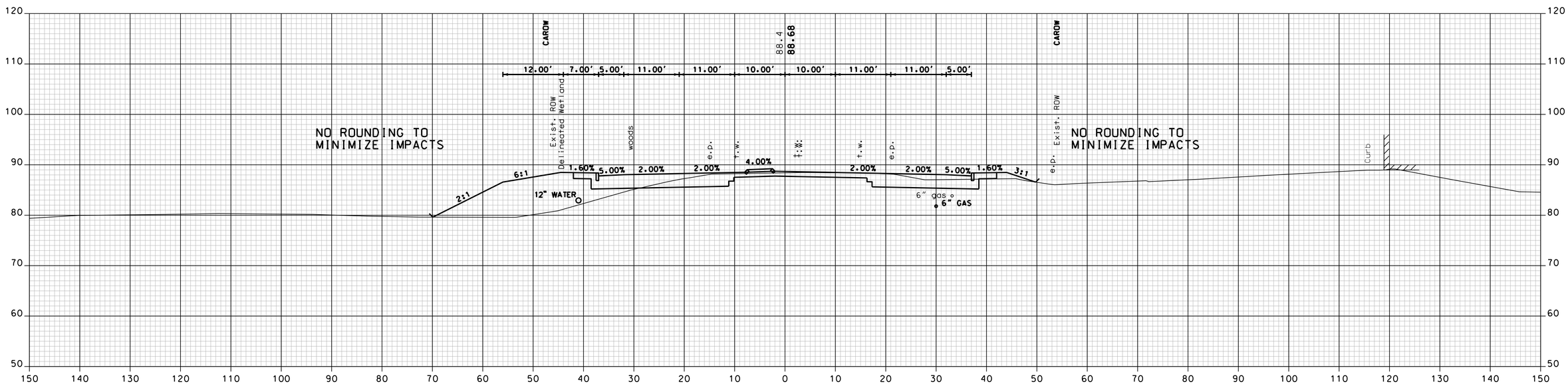
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



1252+50



1252+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

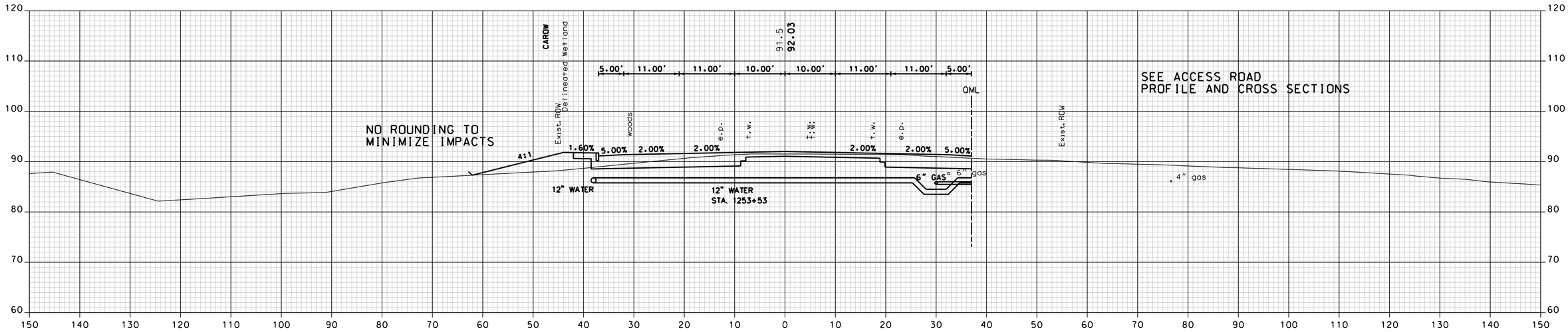
SHEET TOTALS			
COMMON EXCAV.	345.7 C.Y.	ROCK EXCAV.	– C.Y.
FILL	605.1 C.Y.	MUCK EXCAV.	– C.Y.

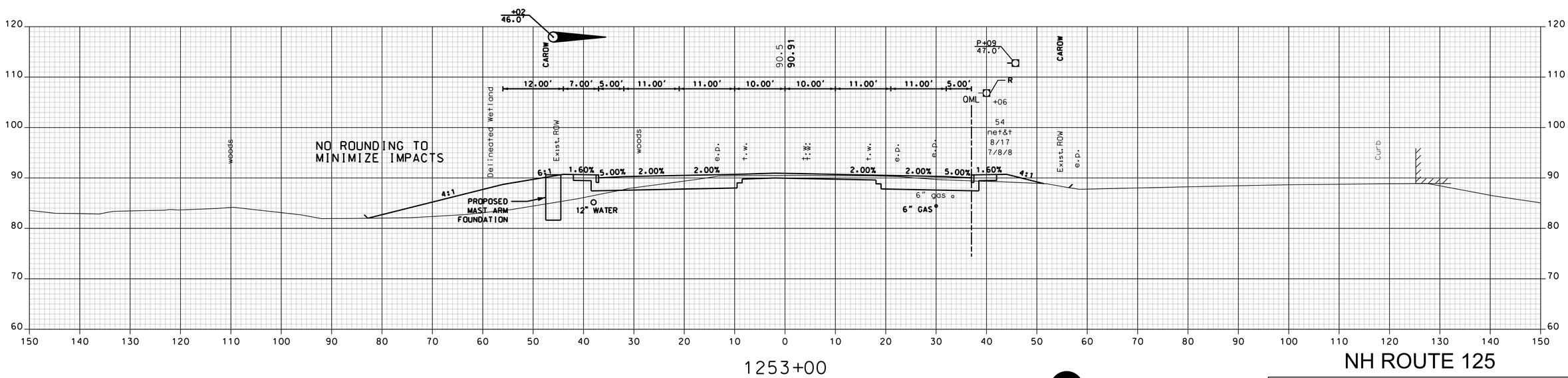
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	125	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE





NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

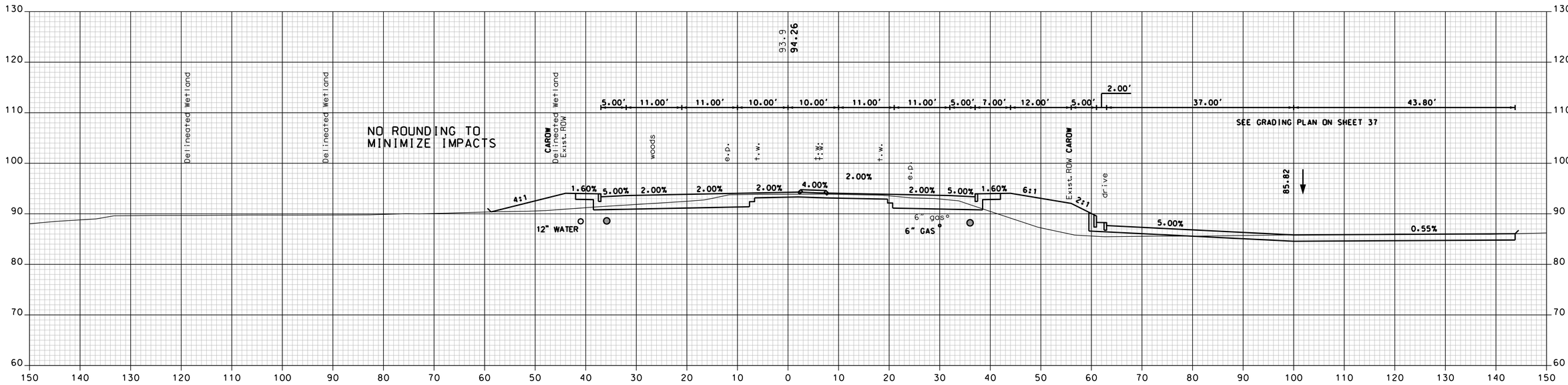
SHEET TOTALS			
COMMON EXCAV.	363.1 C.Y.	ROCK EXCAV.	– C.Y.
FILL	278.0 C.Y.	MUCK EXCAV.	– C.Y.

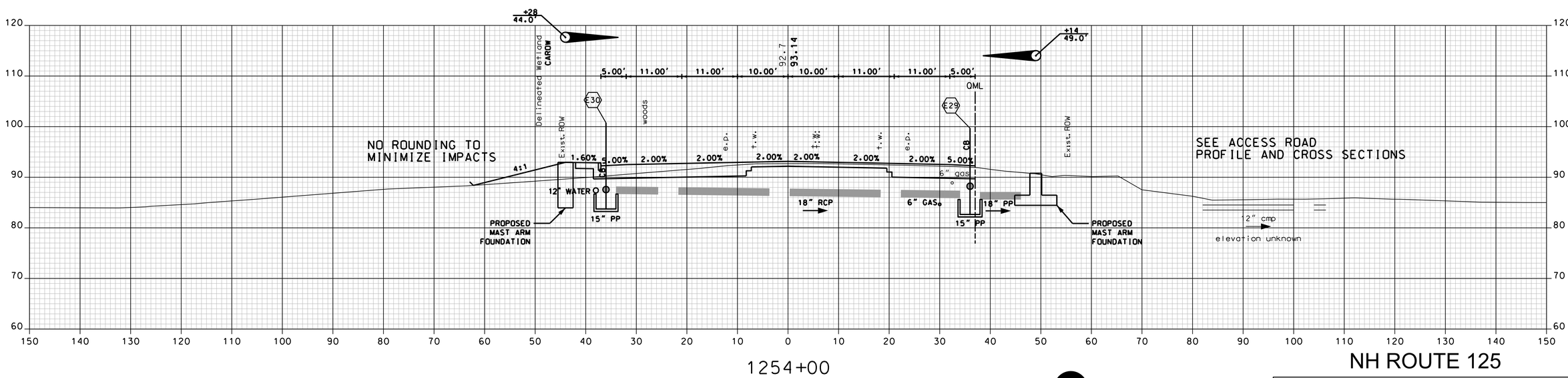
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	126	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE





NH ROUTE 125

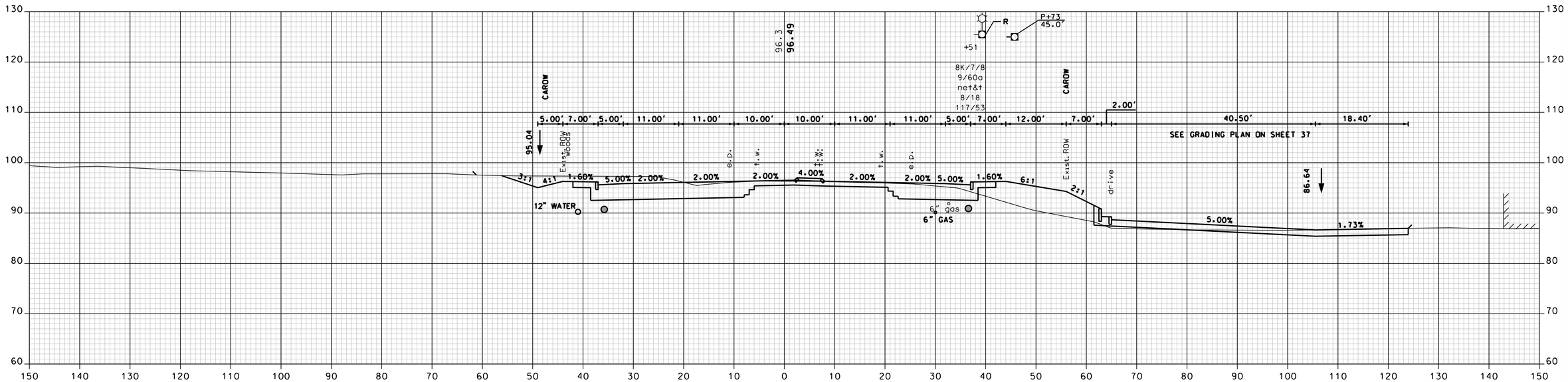
VHB Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	349.1 C.Y.	ROCK EXCAV.	– C.Y.
FILL	452.8 C.Y.	MUCK EXCAV.	– C.Y.

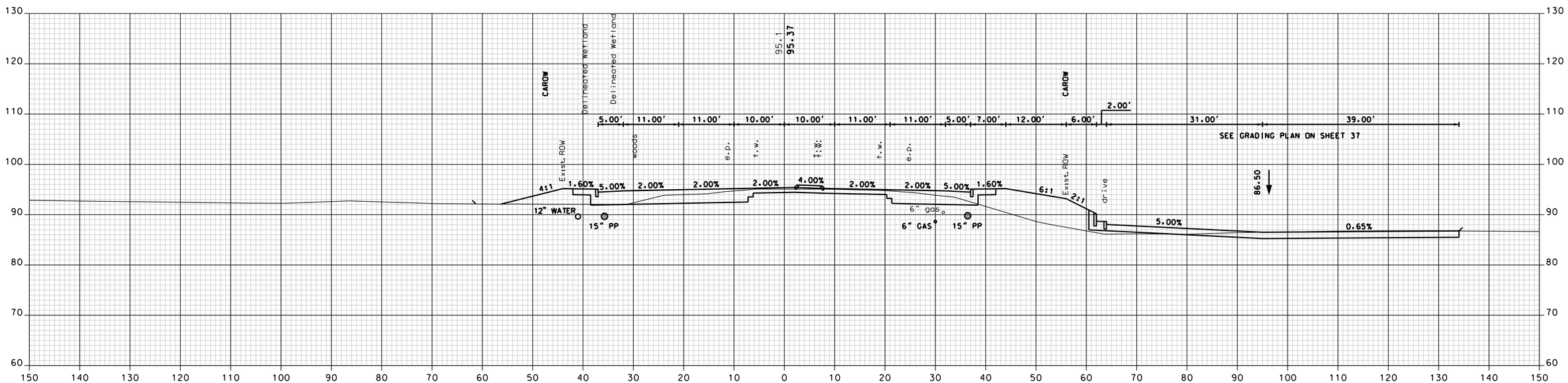
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	127	179

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	



1255+50



1255+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

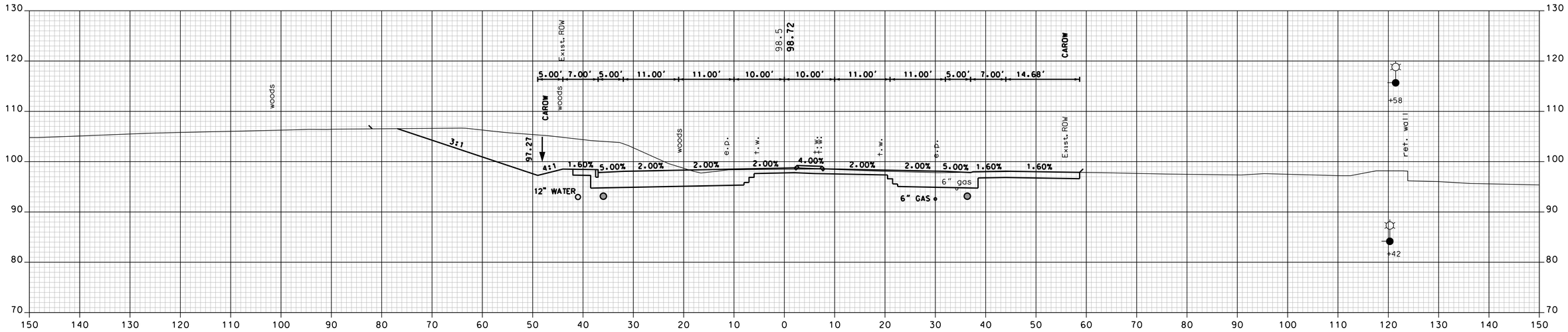
SHEET TOTALS			
COMMON EXCAV.	785.5 C.Y.	ROCK EXCAV.	– C.Y.
FILL	315.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	128	179

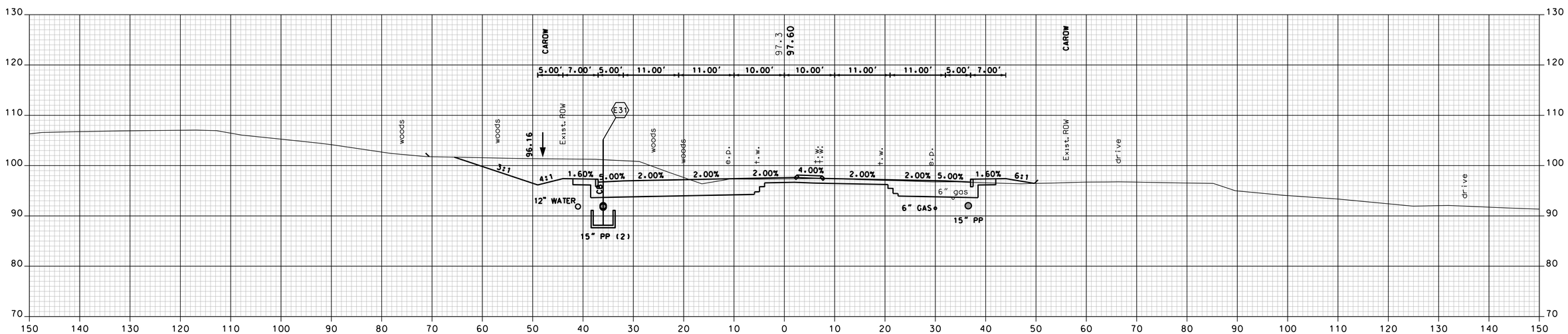
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



1256+50 DRIVE RT



1256+00

NH ROUTE 125

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

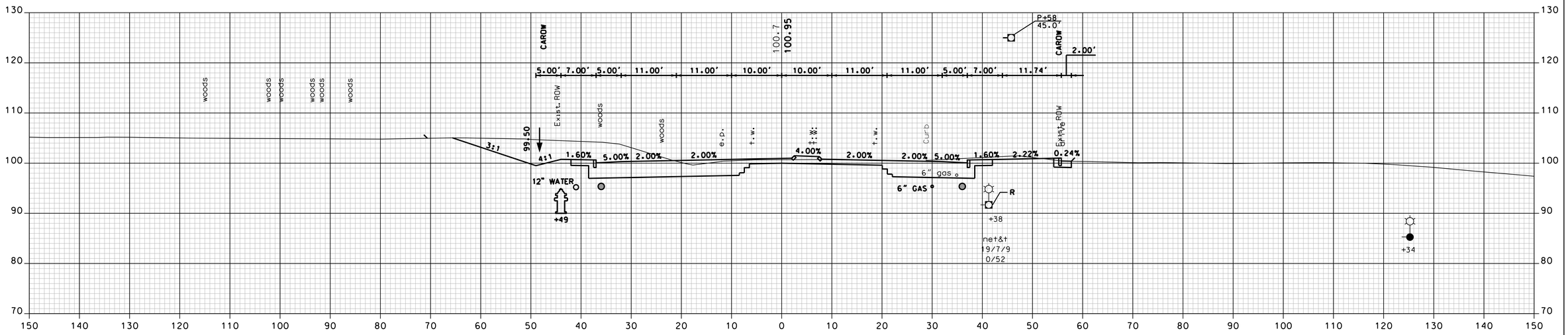
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

Vanasse Hangen Brustlin, Inc.

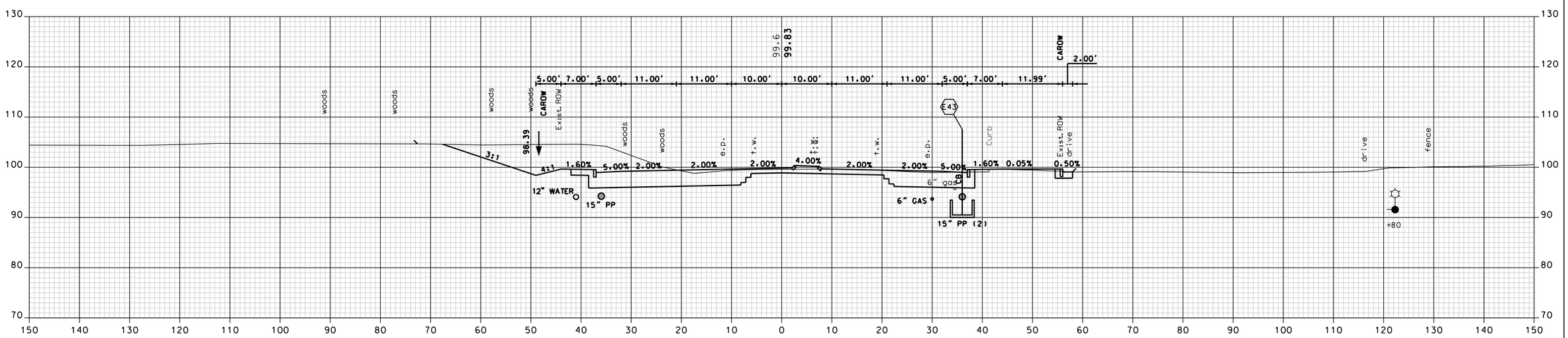
SHEET TOTALS

COMMON EXCAV.	1428.6 C.Y.	ROCK EXCAV.	– C.Y.
FILL	7.8 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	129	179



1257+50



1257+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	1183.7 C.Y.	ROCK EXCAV.	– C.Y.
FILL	4.2 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	130	179

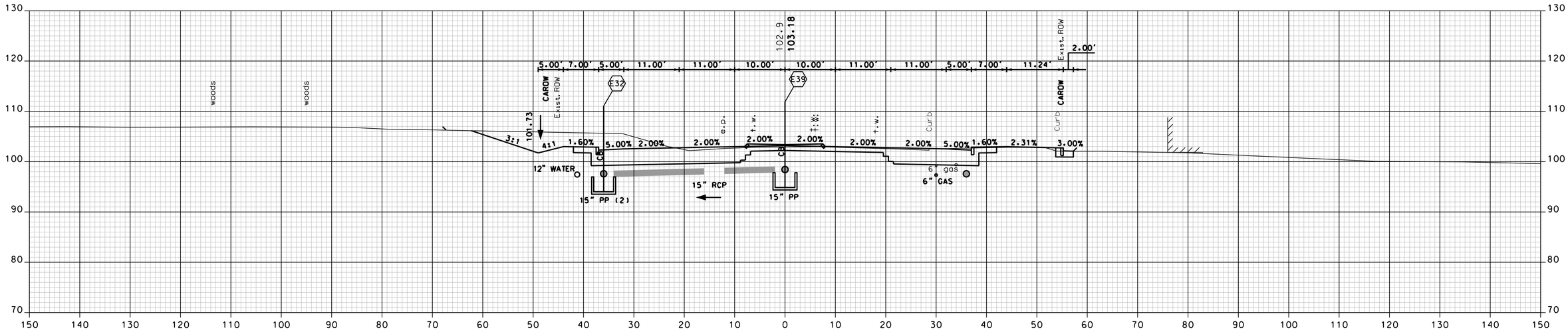
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

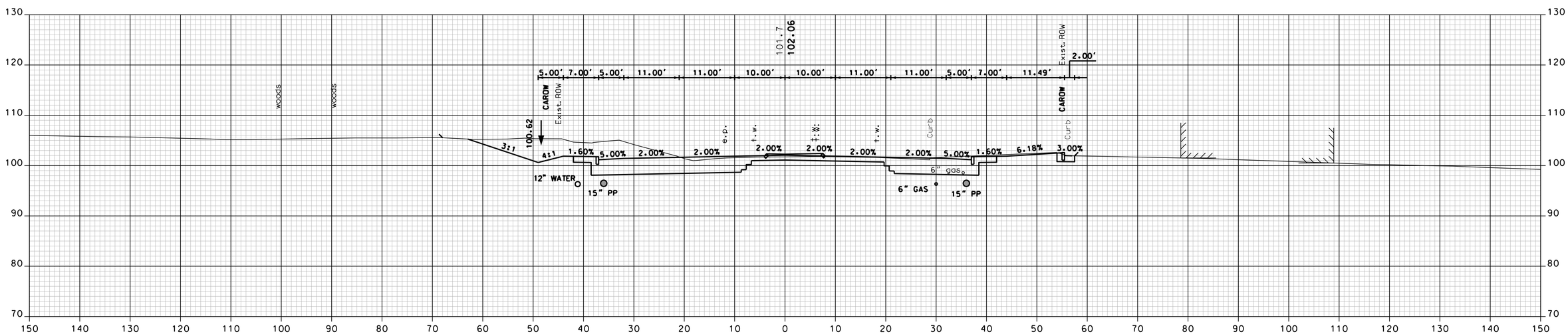
VHB TEAM		DATE
SDR PROCCESSED		7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



1258+50



1258+00

NH ROUTE 125

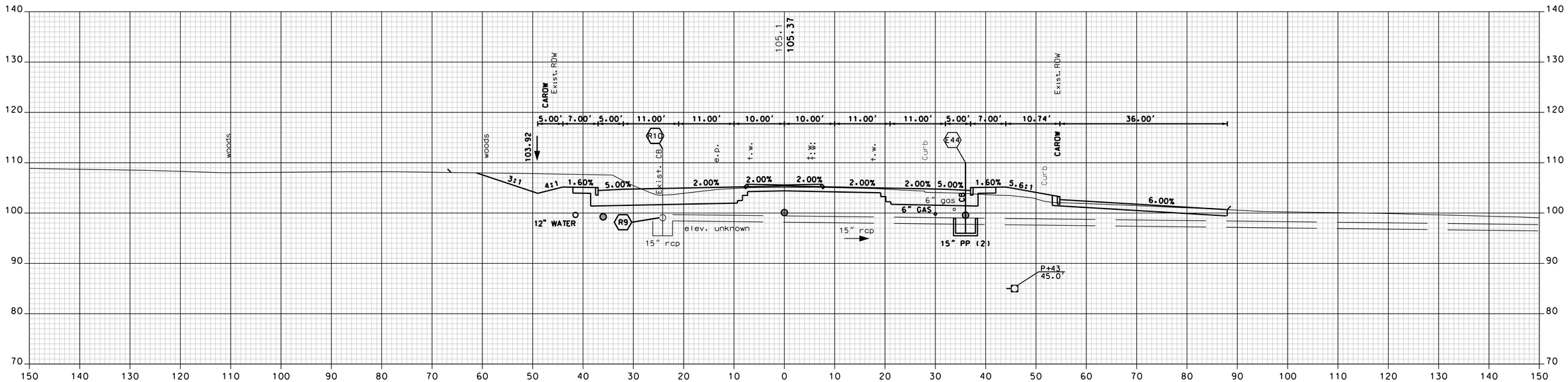
SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

Vanasse Hangen Brustlin, Inc.

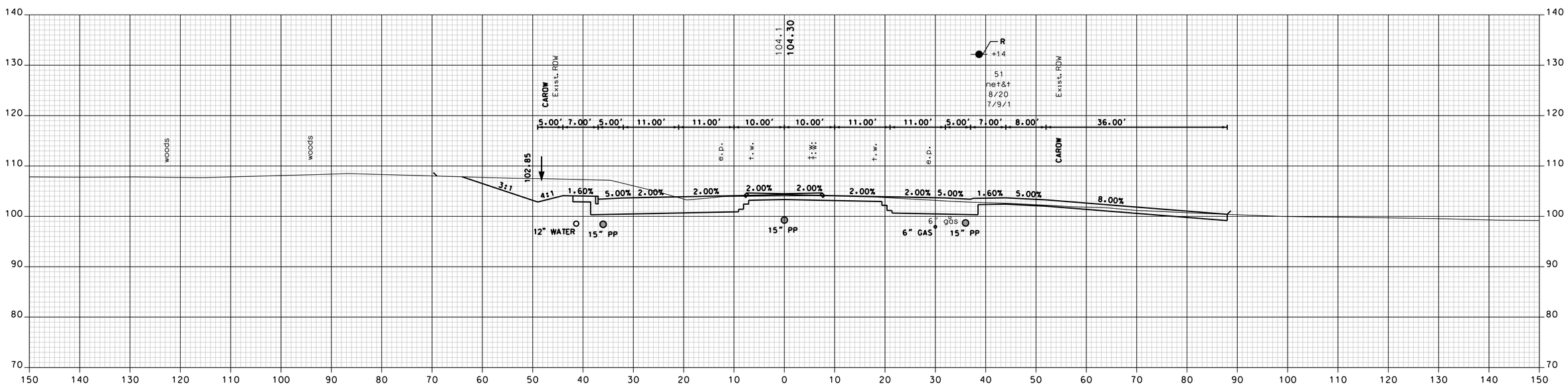
SHEET TOTALS

COMMON EXCAV.	1045.7 C.Y.	ROCK EXCAV.	– C.Y.
FILL	1.8 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	131	179



1259+50



1259+00

DRIVE RT

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

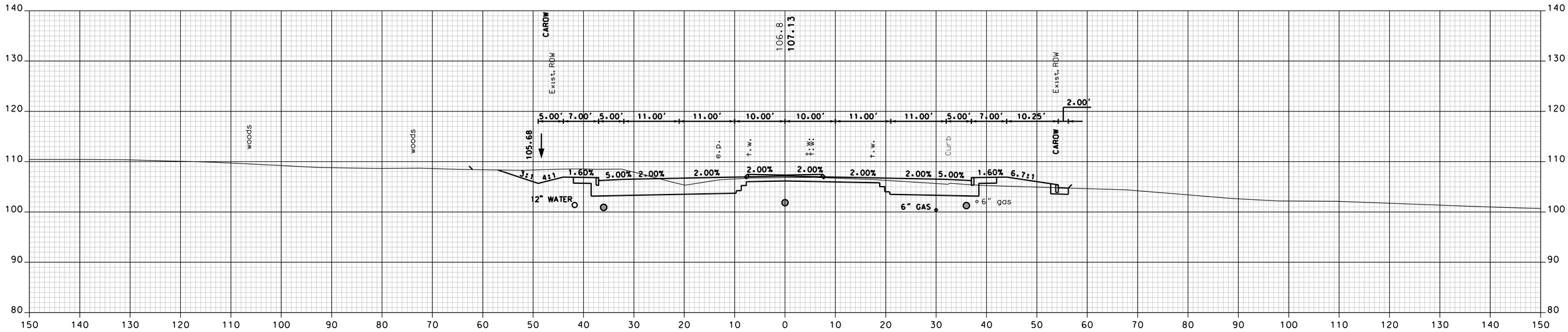
SHEET TOTALS			
COMMON EXCAV.	888.8 C.Y.	ROCK EXCAV.	– C.Y.
FILL	31.9 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	132	179

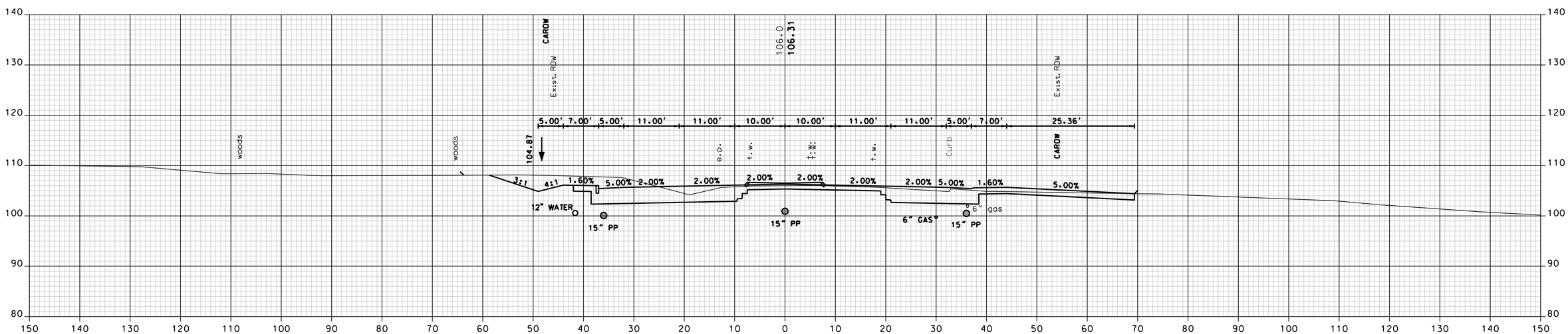
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



1260+50



1260+00

DRIVE RT

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	775.6 C.Y.	ROCK EXCAV.	– C.Y.
FILL	46.3 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	133	179

REVISIONS AFTER PROPOSAL

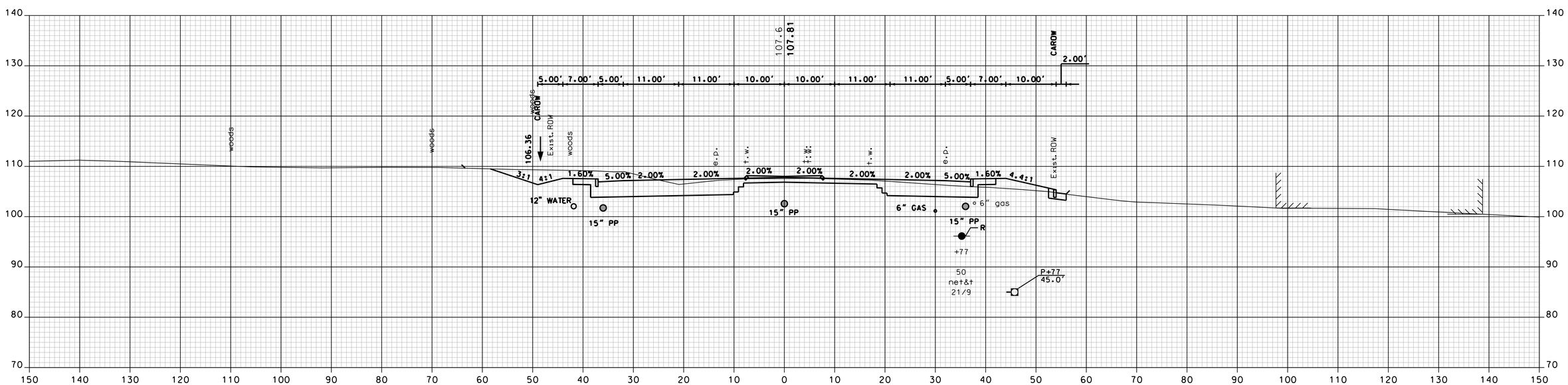
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



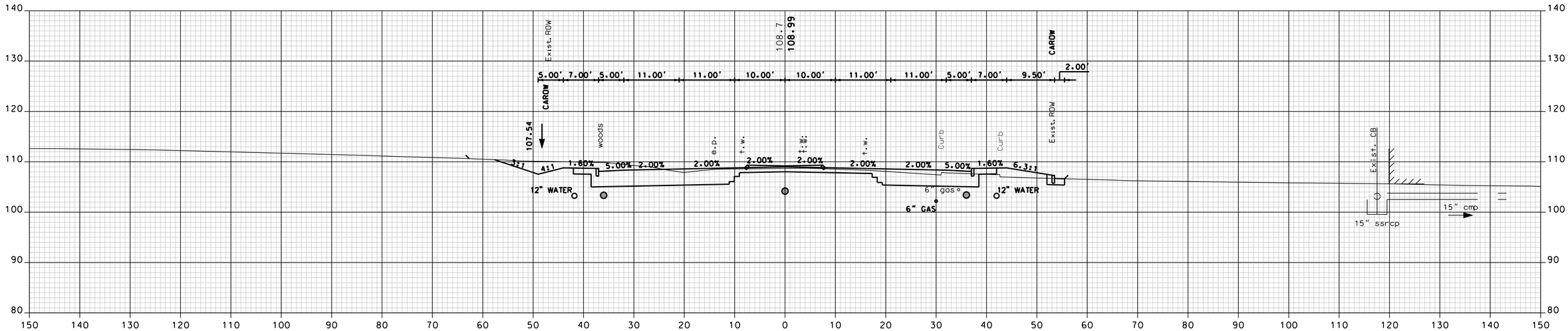
1261+00

NH ROUTE 125

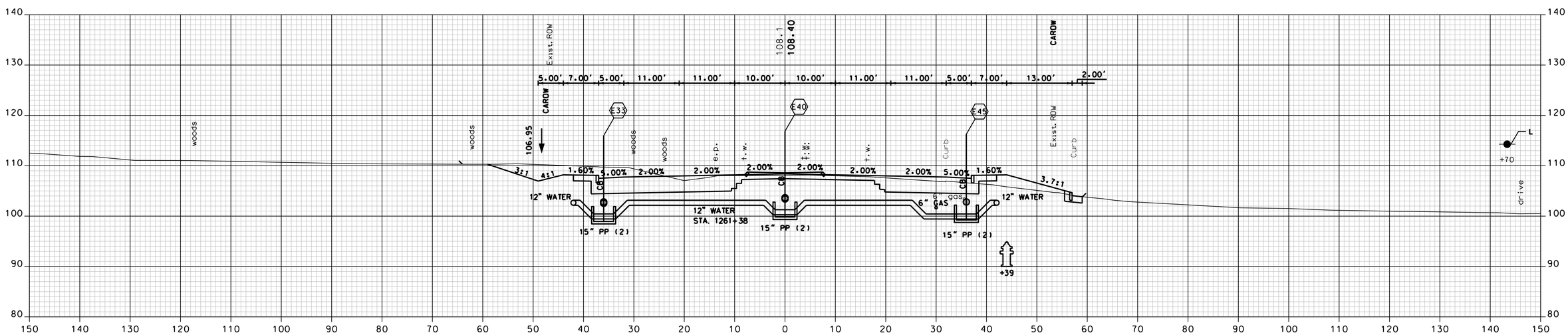
VHB Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	402.6 C.Y.	ROCK EXCAV.	– C.Y.
FILL	38.2 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125A	10044G	134	179



1262+00



1261+50

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

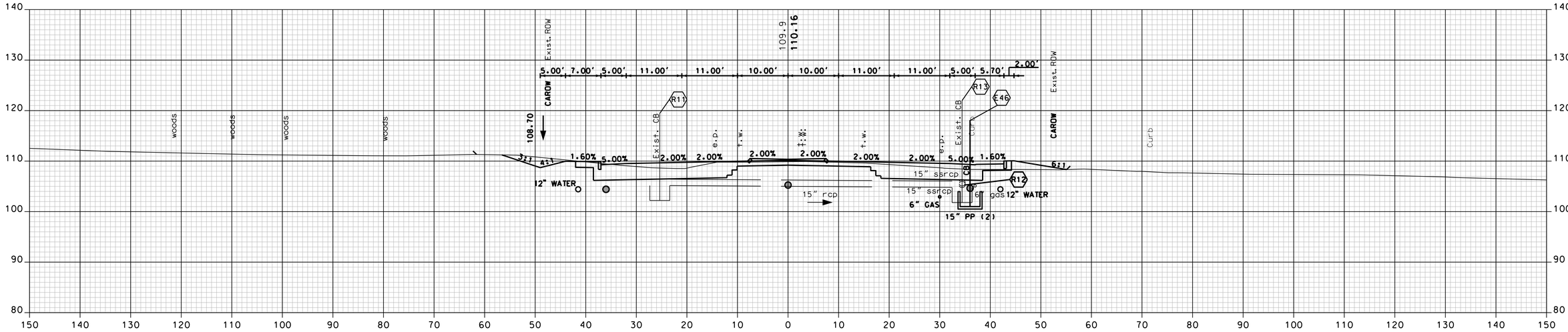
SHEET TOTALS			
COMMON EXCAV.	749.6 C.Y.	ROCK EXCAV.	– C.Y.
FILL	48.1 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	135	179

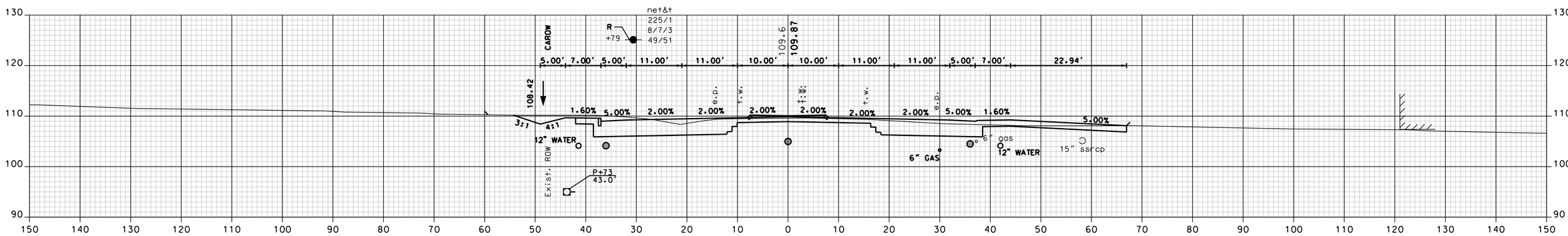
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

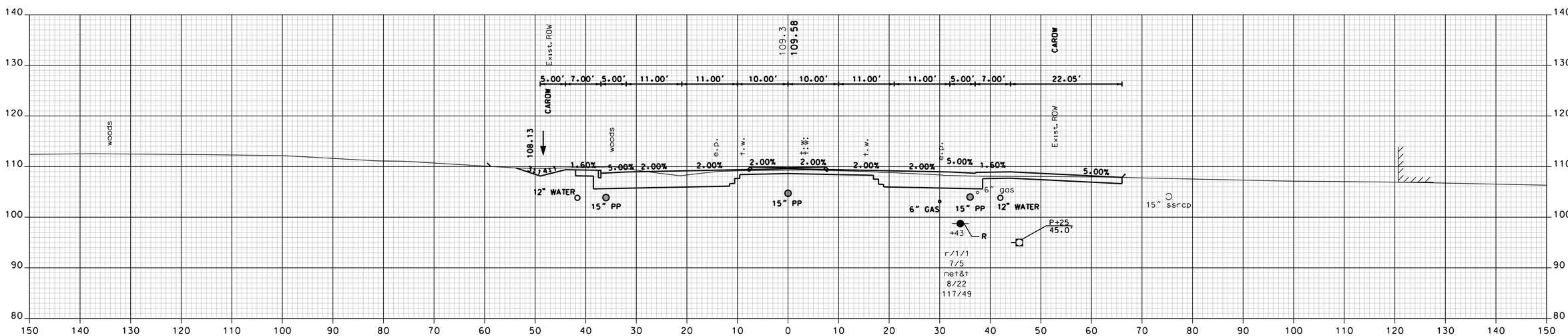
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	



1263+00



1262+75 DRIVE RT



1262+50

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

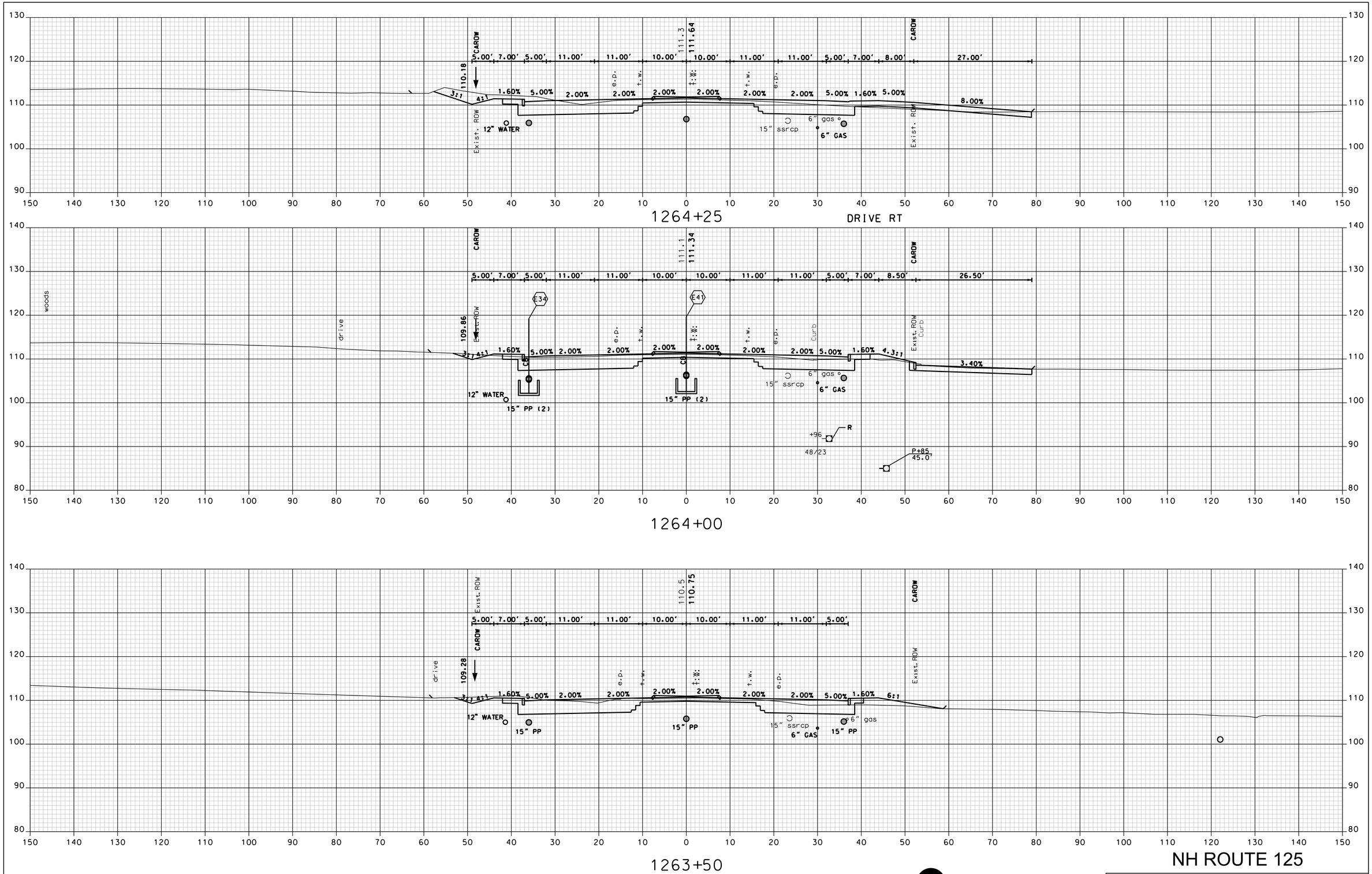
SHEET TOTALS			
COMMON EXCAV.	633.4 C.Y.	ROCK EXCAV.	– C.Y.
FILL	30.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	136	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	



NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	644.0 C.Y.	ROCK EXCAV.	– C.Y.
FILL	27.7 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	137	179

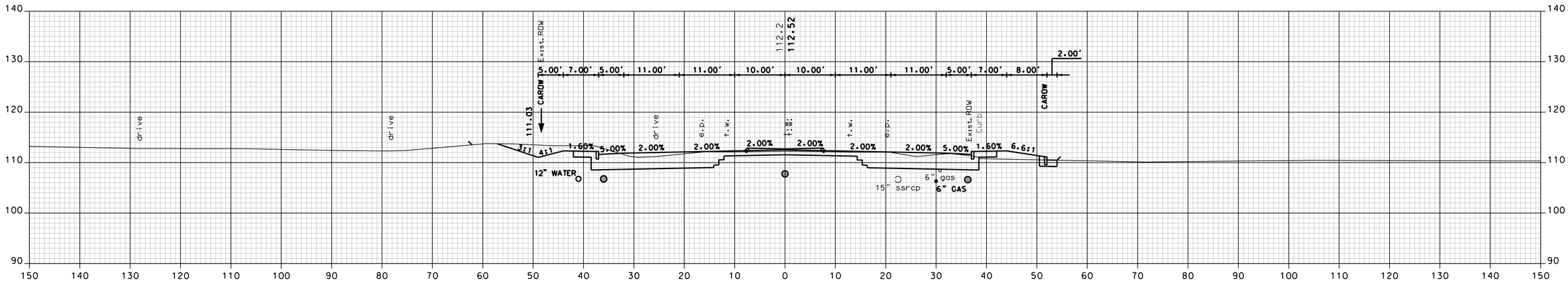
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

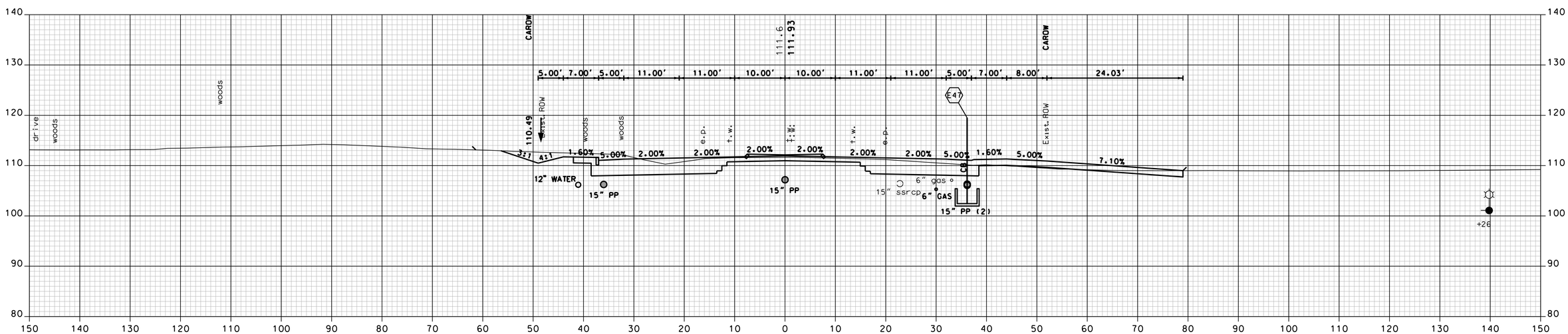
SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



1265+00



1264+50

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

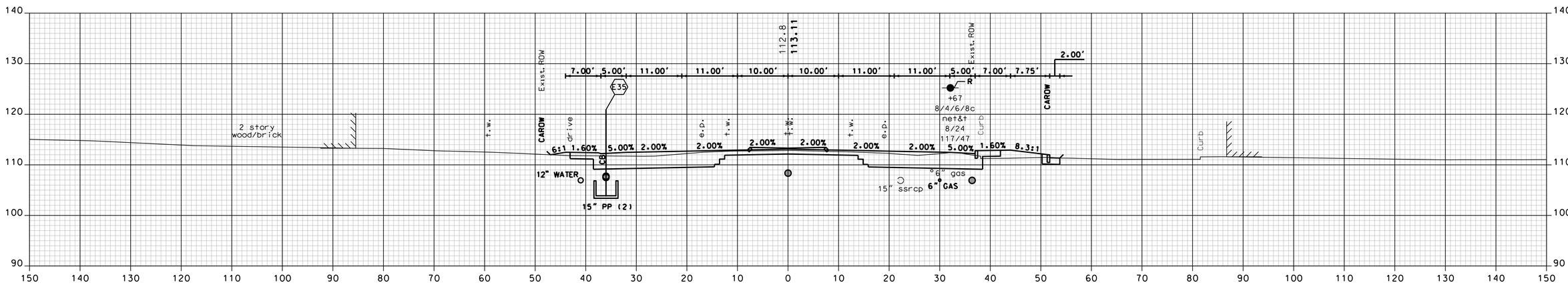
SHEET TOTALS			
COMMON EXCAV.	512.5 C.Y.	ROCK EXCAV.	– C.Y.
FILL	23.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	138	179

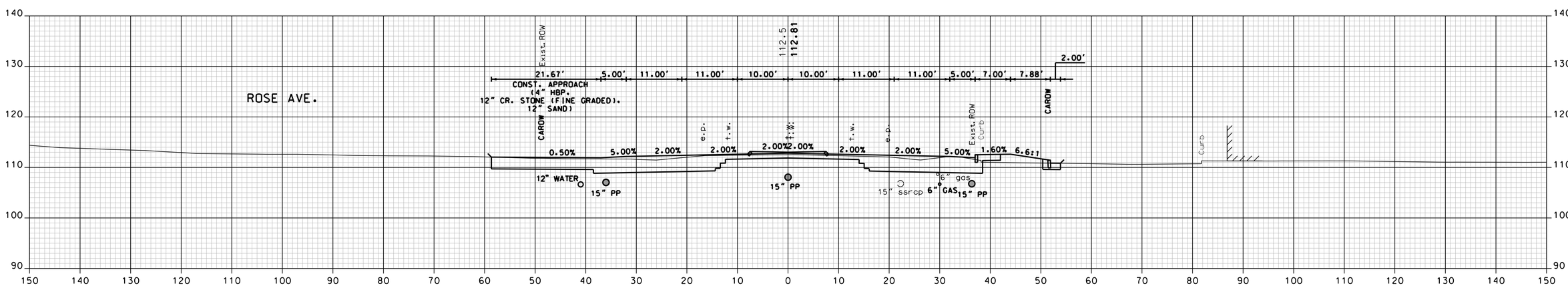
		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



1265+50



1265+25

NH ROUTE 125

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

VHB Vanasse Hangen Brustlin, Inc.

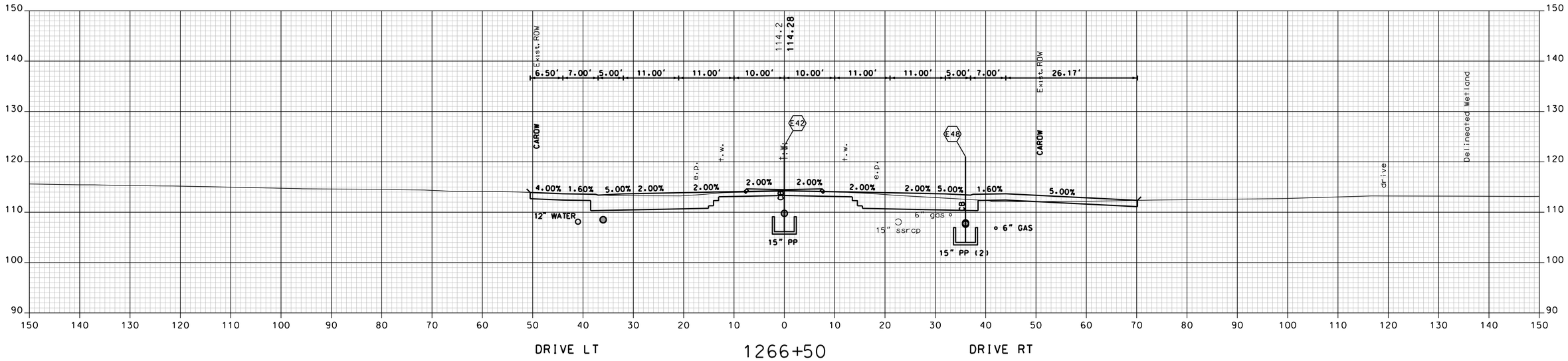
SHEET TOTALS

COMMON EXCAV.	425.6 C.Y.	ROCK EXCAV.	– C.Y.
FILL	30.5 C.Y.	MUCK EXCAV.	– C.Y.

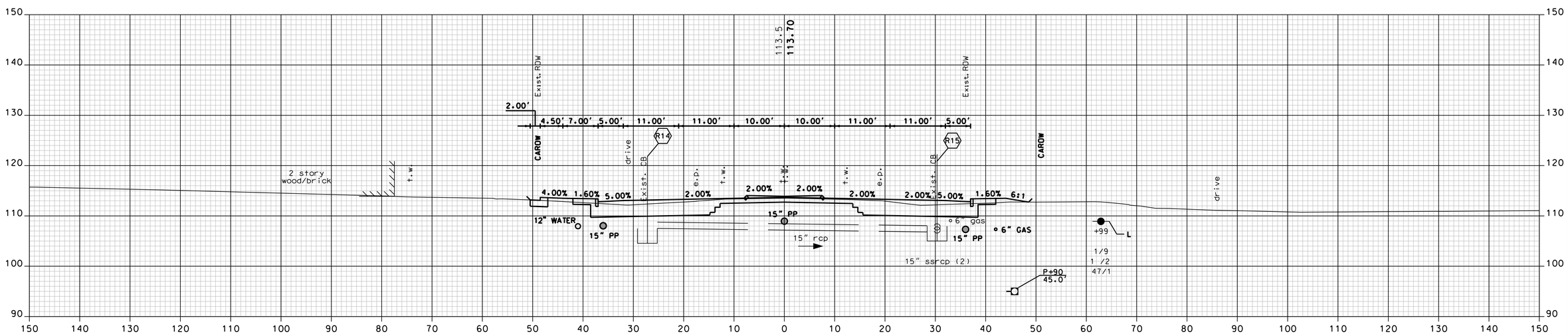
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	139	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



DRIVE LT 1266+50 DRIVE RT



1266+00

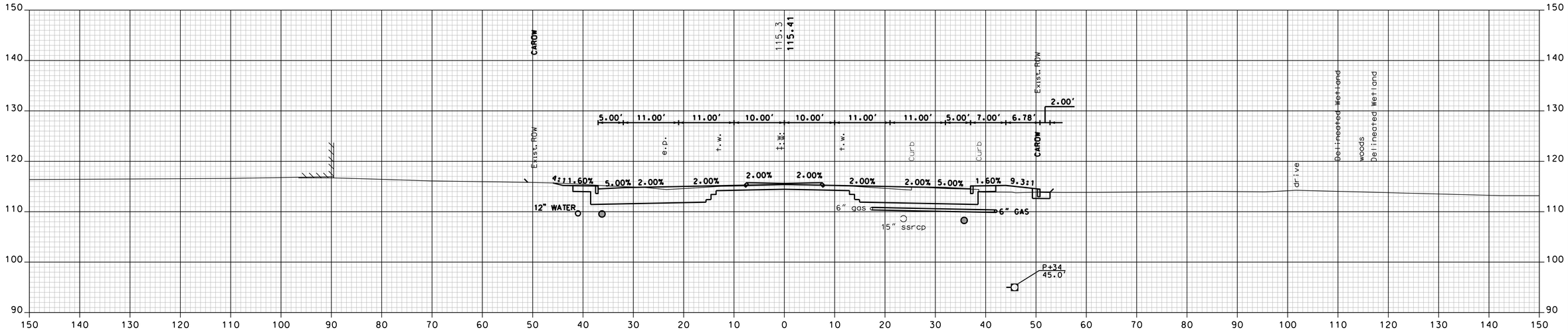
NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

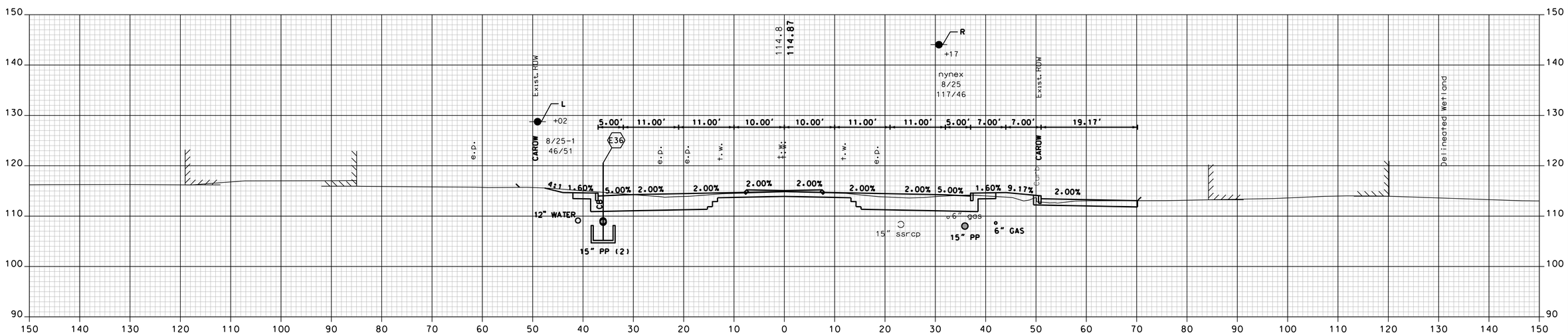
SHEET TOTALS			
COMMON EXCAV.	588.5 C.Y.	ROCK EXCAV.	– C.Y.
FILL	12.9 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	140	179

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE



1267+50



1267+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	654.4 C.Y.	ROCK EXCAV.	– C.Y.
FILL	34.7 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	141	179

REVISIONS AFTER PROPOSAL

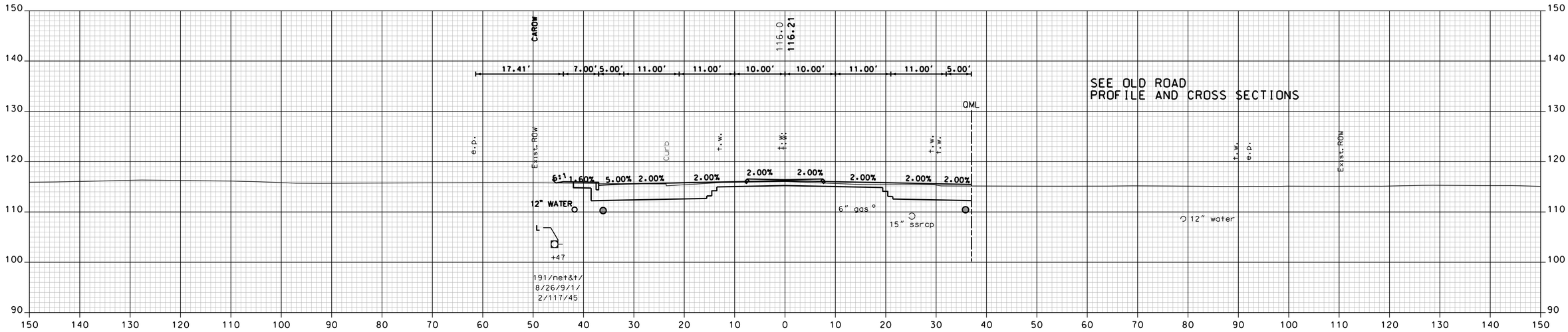
NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

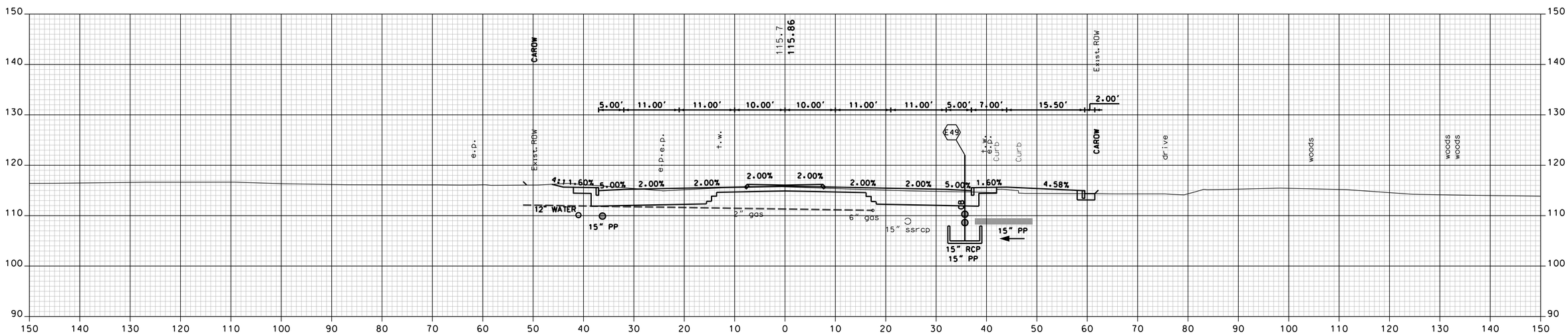
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



1268+50



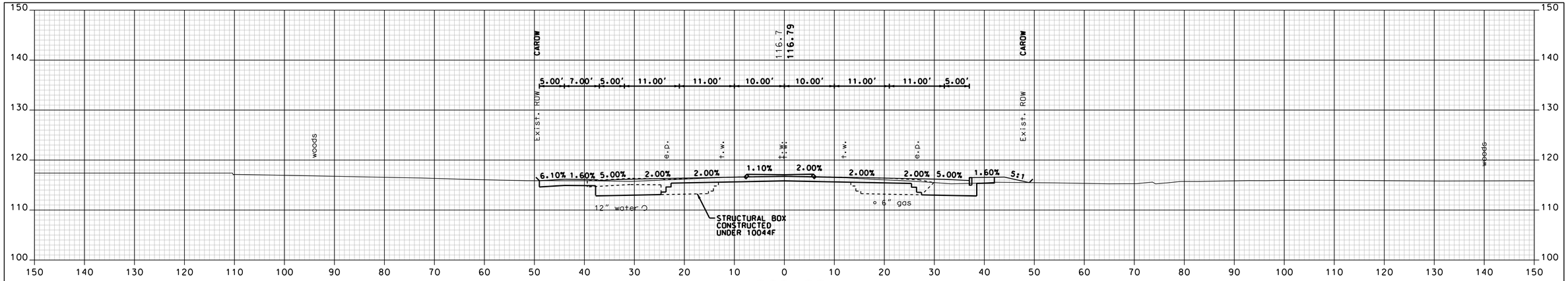
1268+00

NH ROUTE 125

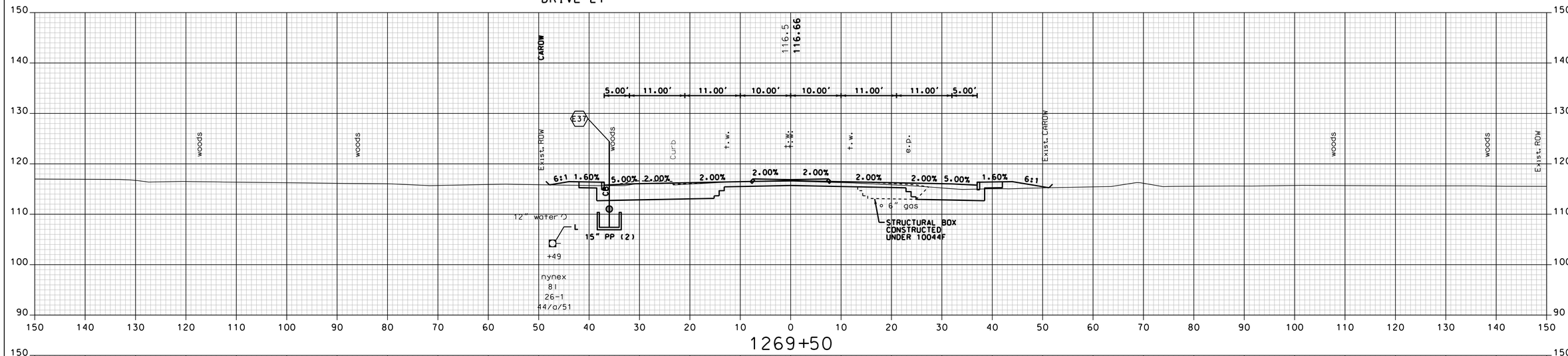
VHB Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	551.1 C.Y.	ROCK EXCAV.	– C.Y.
FILL	12.9 C.Y.	MUCK EXCAV.	– C.Y.

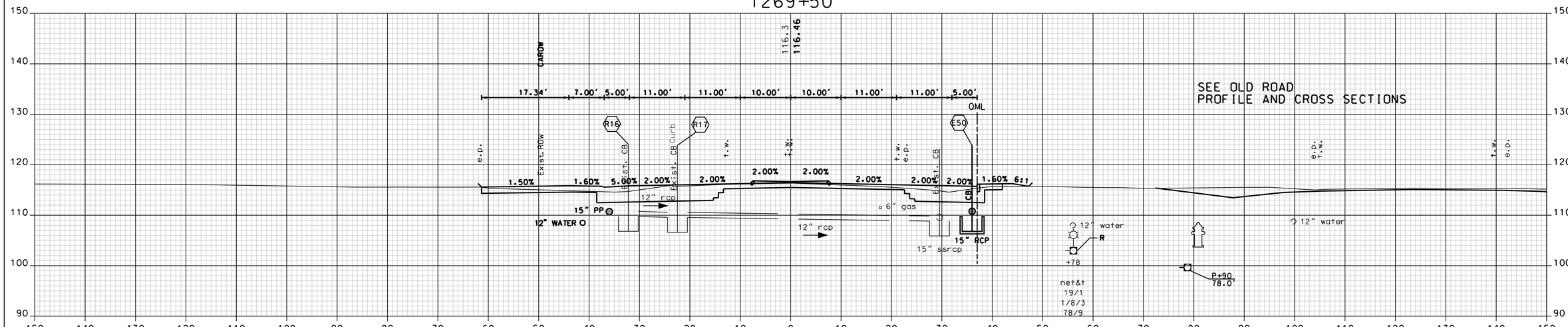
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	142	179



DRIVE LT 1269+82



1269+50



SEE OLD ROAD PROFILE AND CROSS SECTIONS

DRIVE LT 1269+00

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	744.3 C.Y.	ROCK EXCAV.	– C.Y.
FILL	35.4 C.Y.	MUCK EXCAV.	– C.Y.

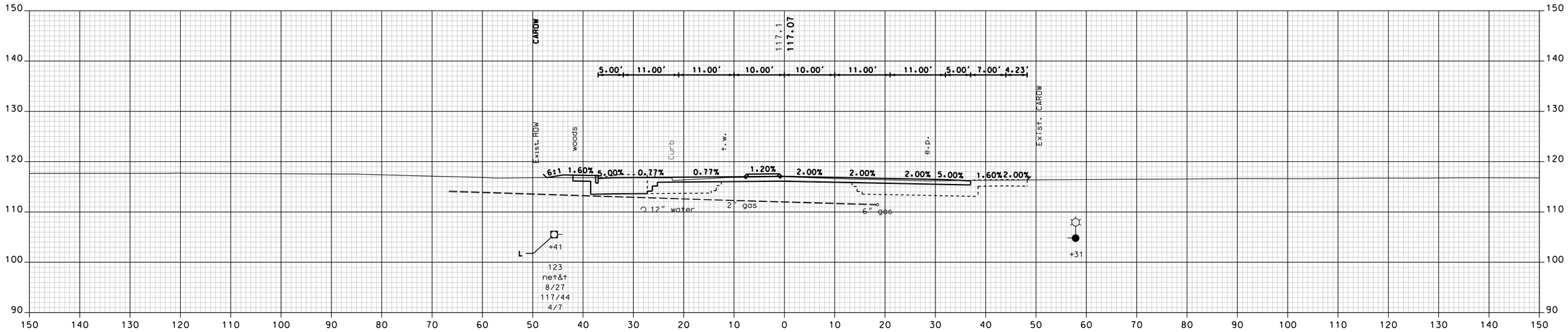
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	143	179

REVISIONS AFTER PROPOSAL

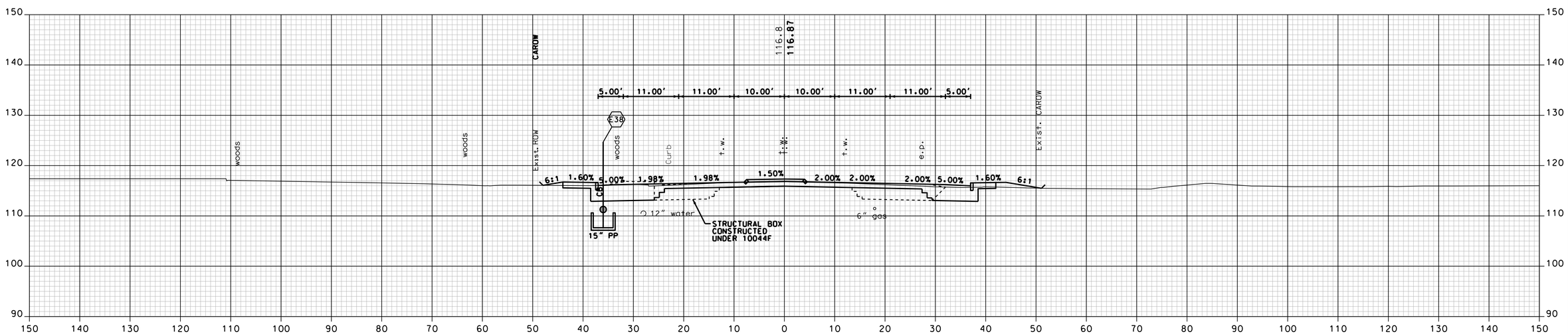
NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015

AS BUILT DETAILS DATE



1270+50



1270+00

NH ROUTE 125

VHB Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	333.7 C.Y.	ROCK EXCAV.	– C.Y.
FILL	12.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	144	179

REVISIONS AFTER PROPOSAL

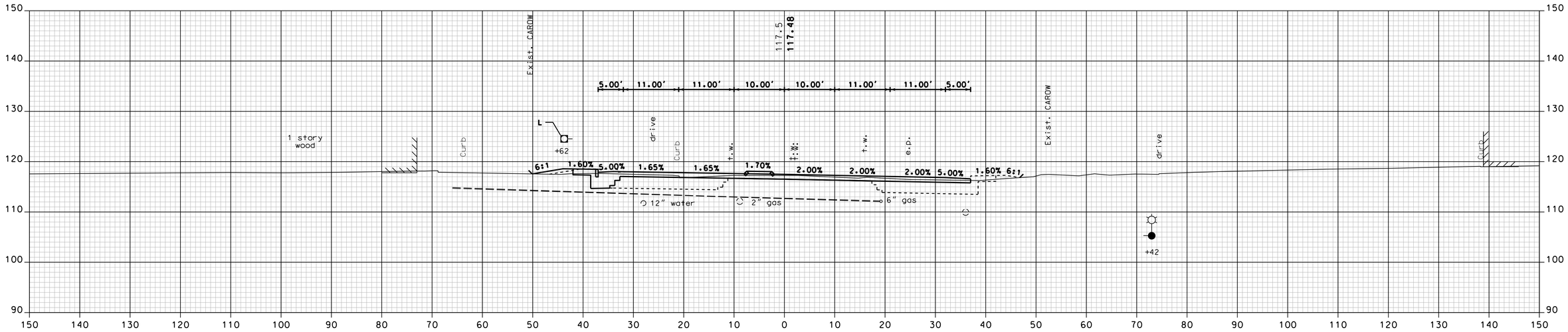
NUMBER	DATE	STATION	STATION	DESCRIPTION

		DATE
SDR PROCCESSED	VHB TEAM	7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

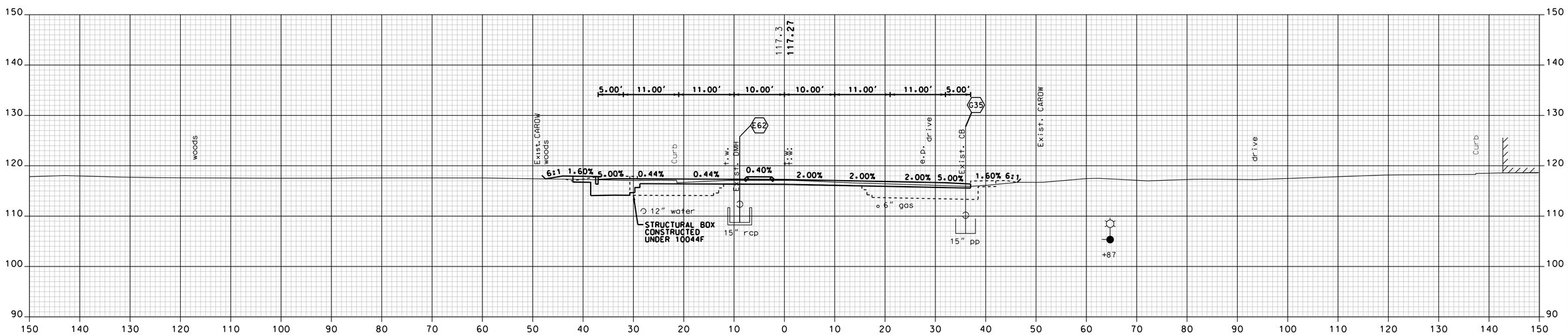
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	



1271+50



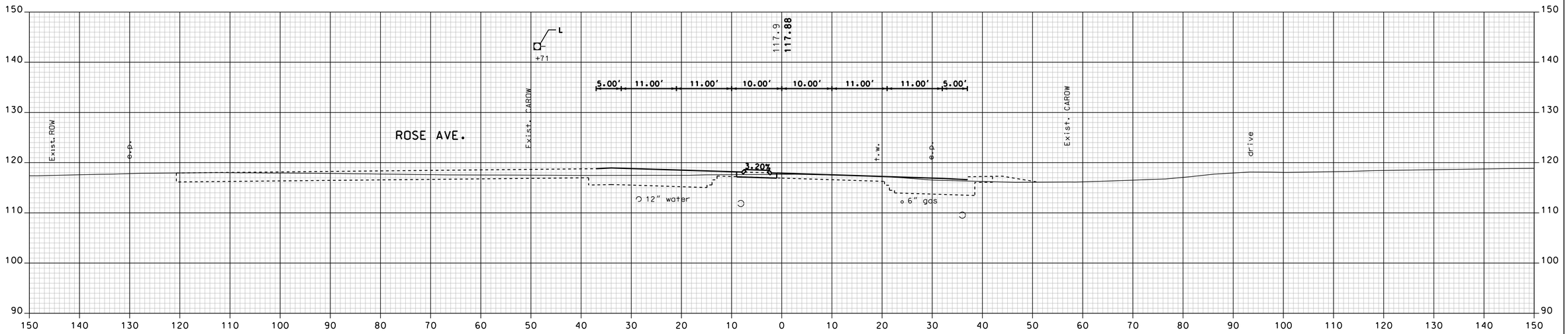
1271+00

NH ROUTE 125

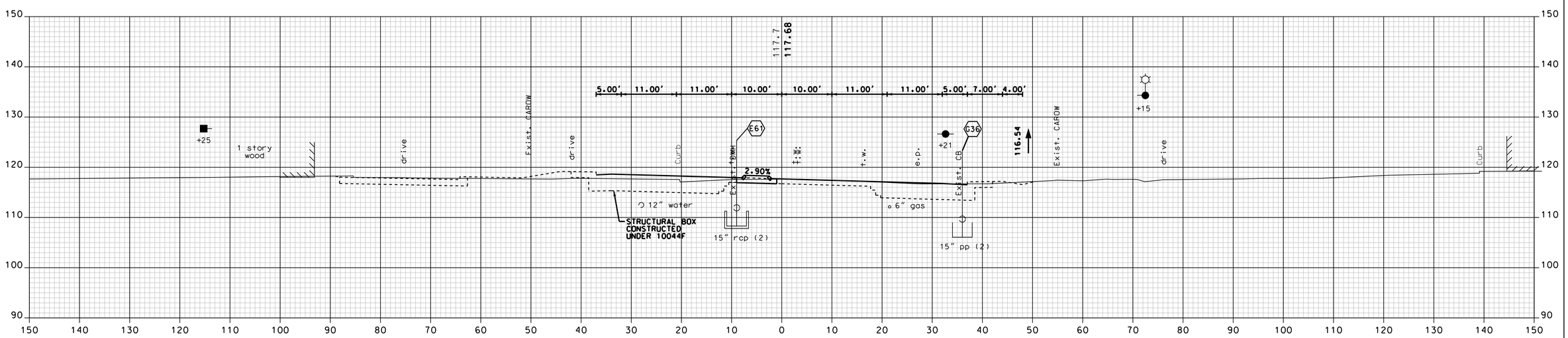
Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	164.1 C.Y.	ROCK EXCAV.	– C.Y.
FILL	12.2 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	145	179



1272+50



1272+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

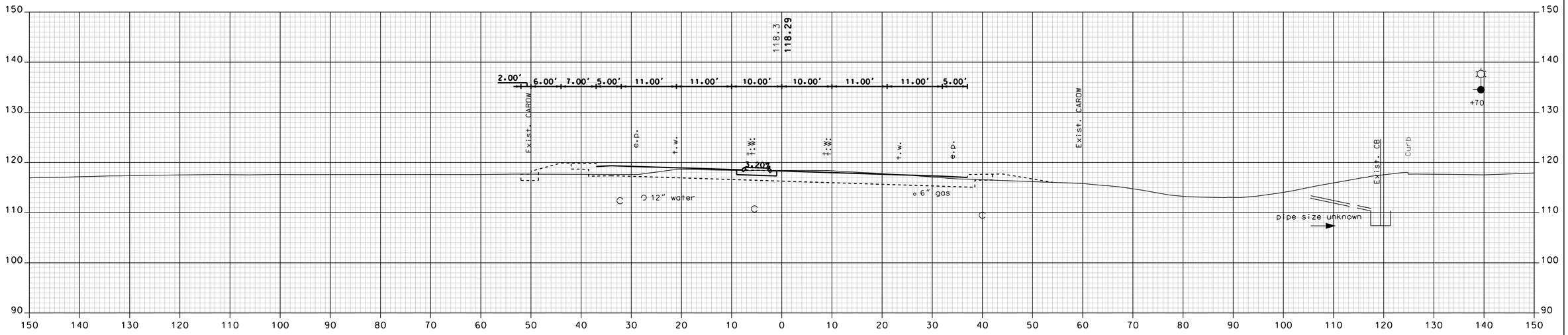
SHEET TOTALS			
COMMON EXCAV.	21.7 C.Y.	ROCK EXCAV.	– C.Y.
FILL	0.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	146	179

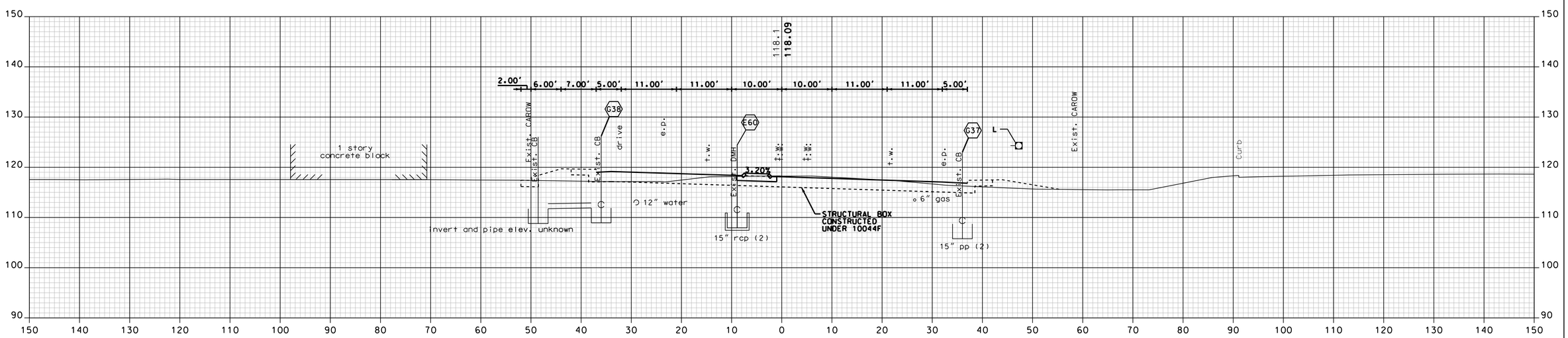
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

VHB TEAM		DATE
SDR PROCCESSED		7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE



1273+50



1273+00

NH ROUTE 125

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV.	14.2 C.Y.	ROCK EXCAV.	– C.Y.
FILL	0.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_125B	10044G	147	179

REVISIONS AFTER PROPOSAL

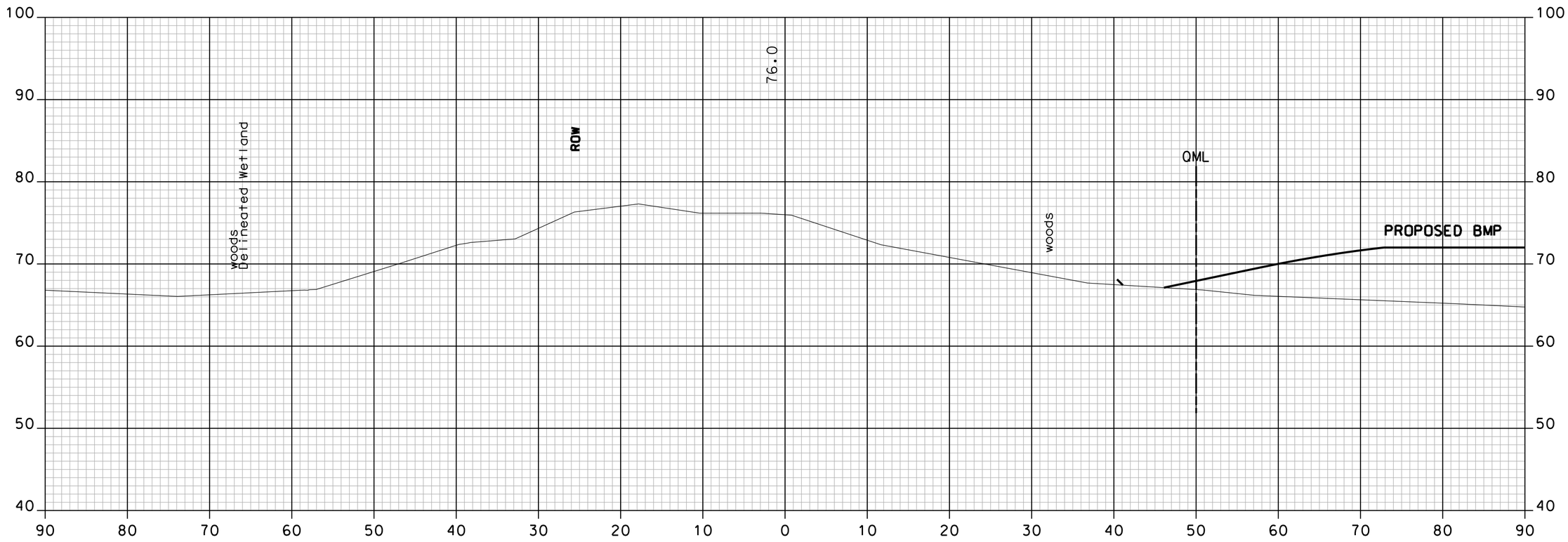
NUMBER	DATE	STATION	STATION	DESCRIPTION

VHB TEAM		DATE
SDR PROCCESSED		7/2009
NEW DESIGN	F. KOCZALKA	9/2014
SHEET CHECKED	A. GRANDE	8/2015
AS BUILT DETAILS		DATE

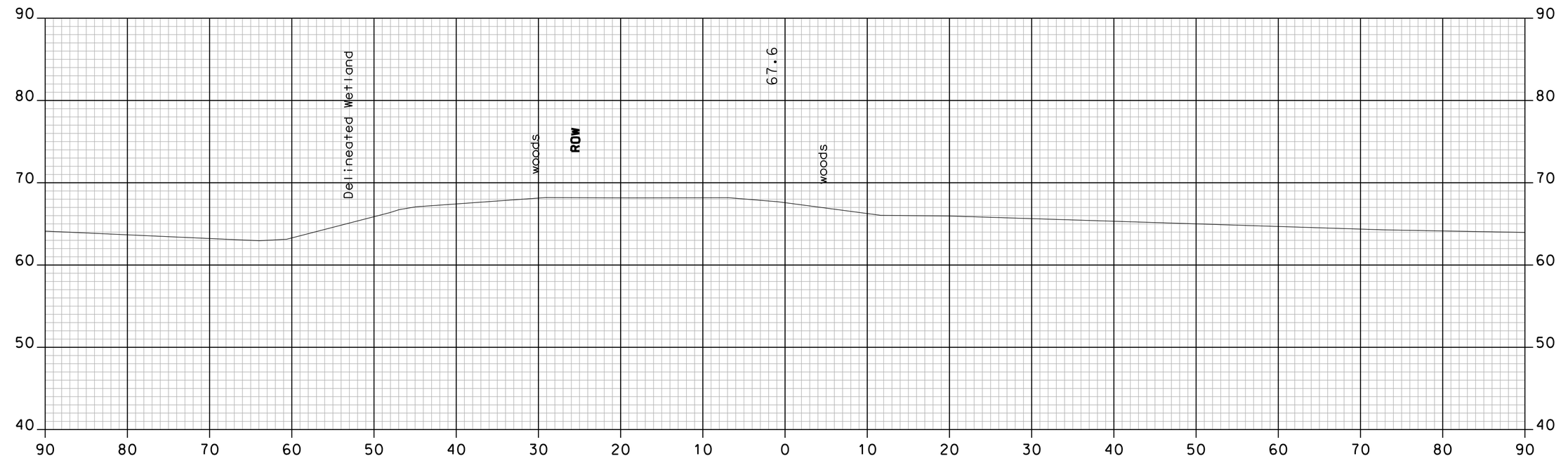
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

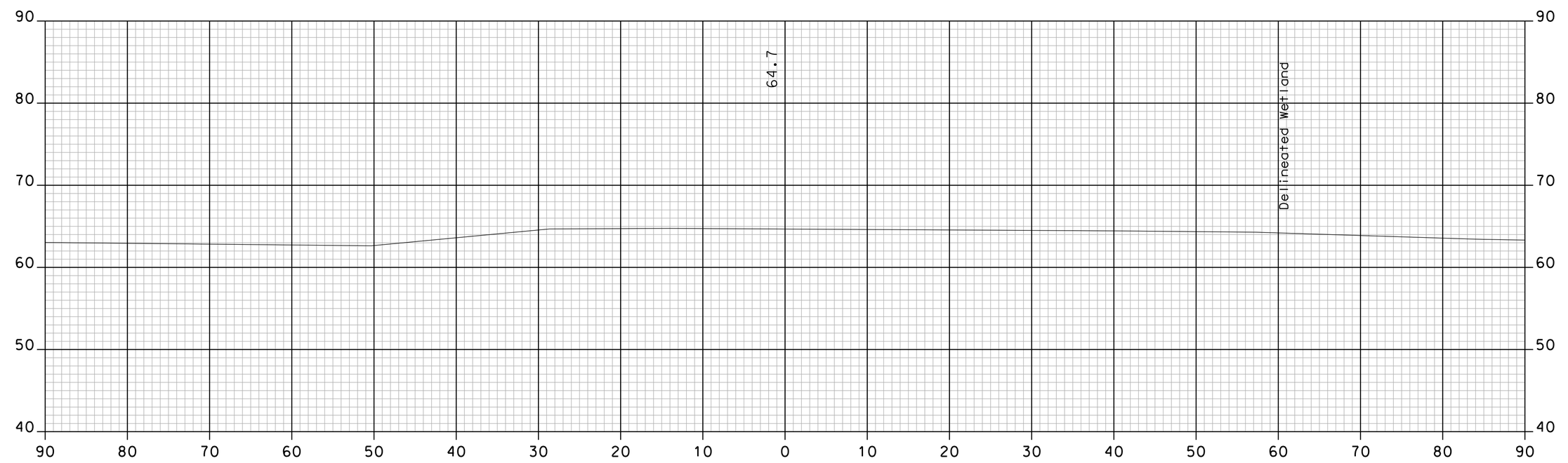
NUMBER	DATE	STATION	STATION	DESCRIPTION



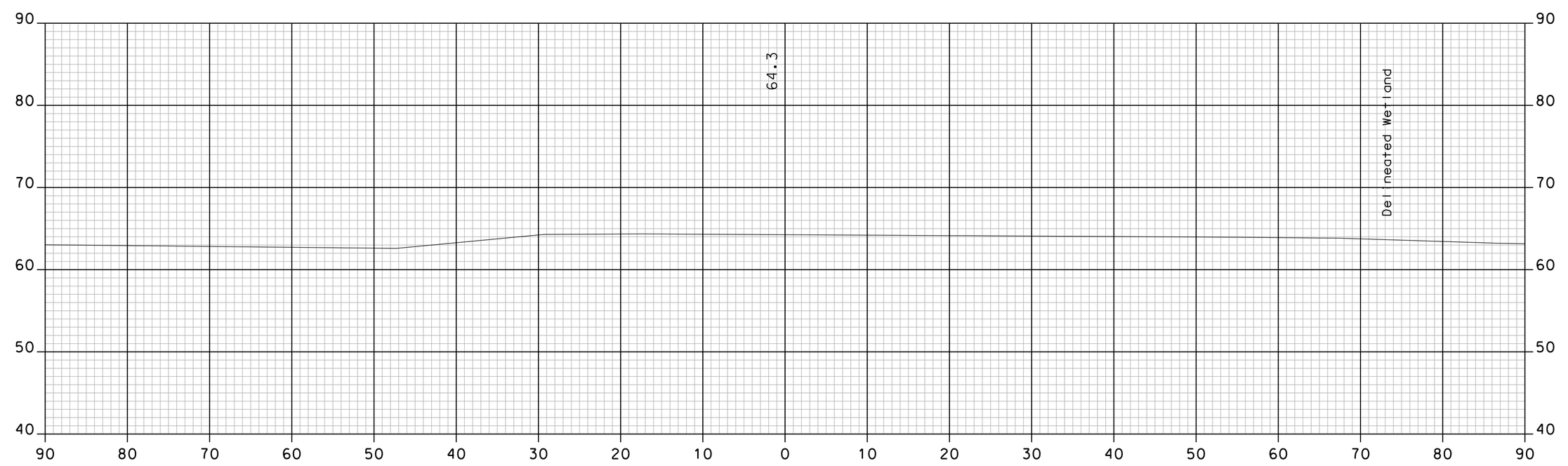
102+50



102+00



101+50



101+36

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

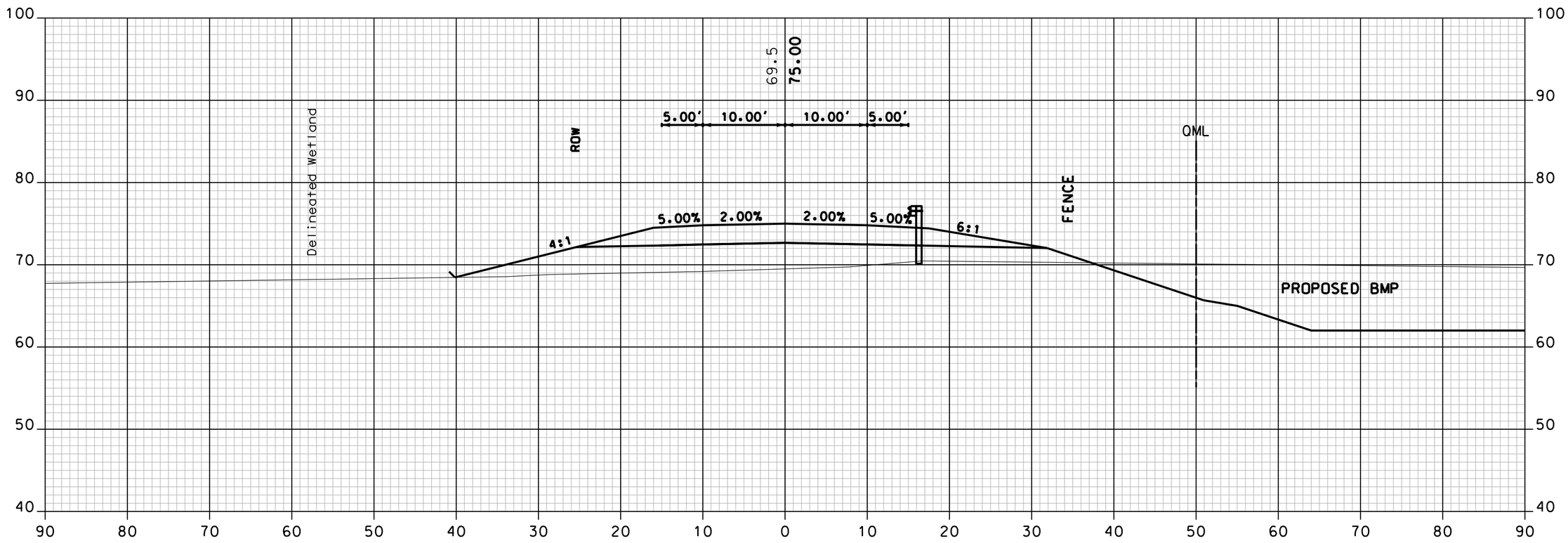
COMMON EXCAV.	61.4 C.Y.	ROCK EXCAV.	– C.Y.
FILL	0.0 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	148	179

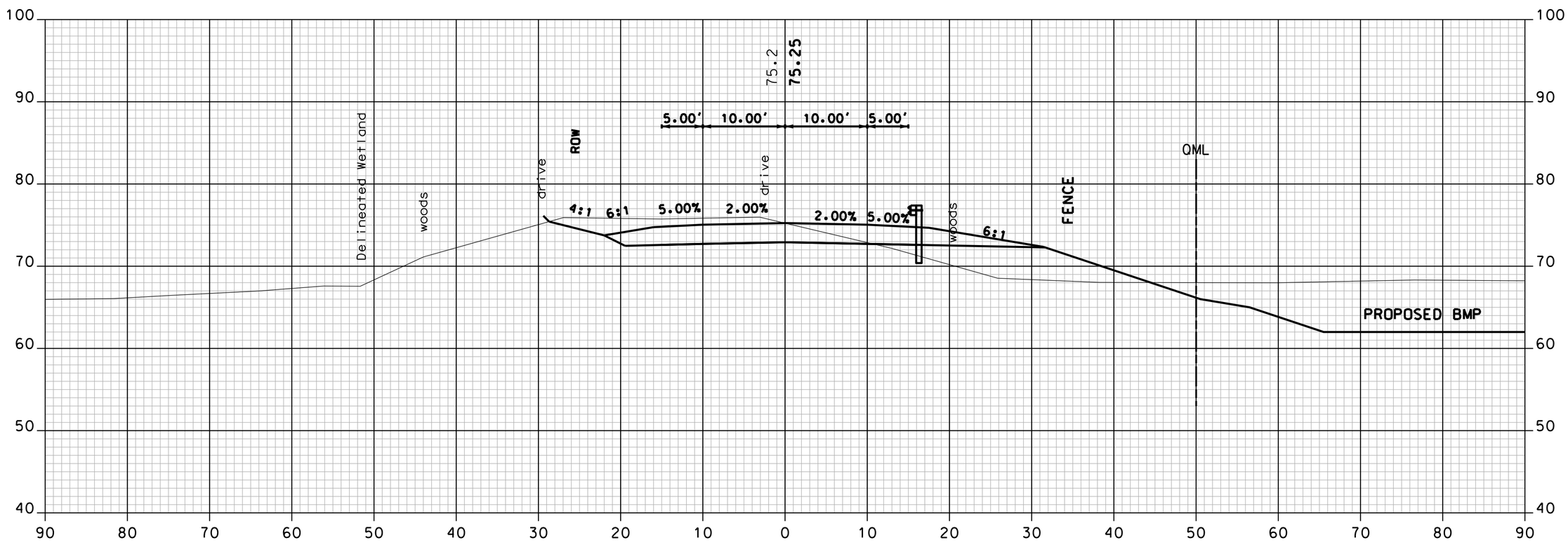
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

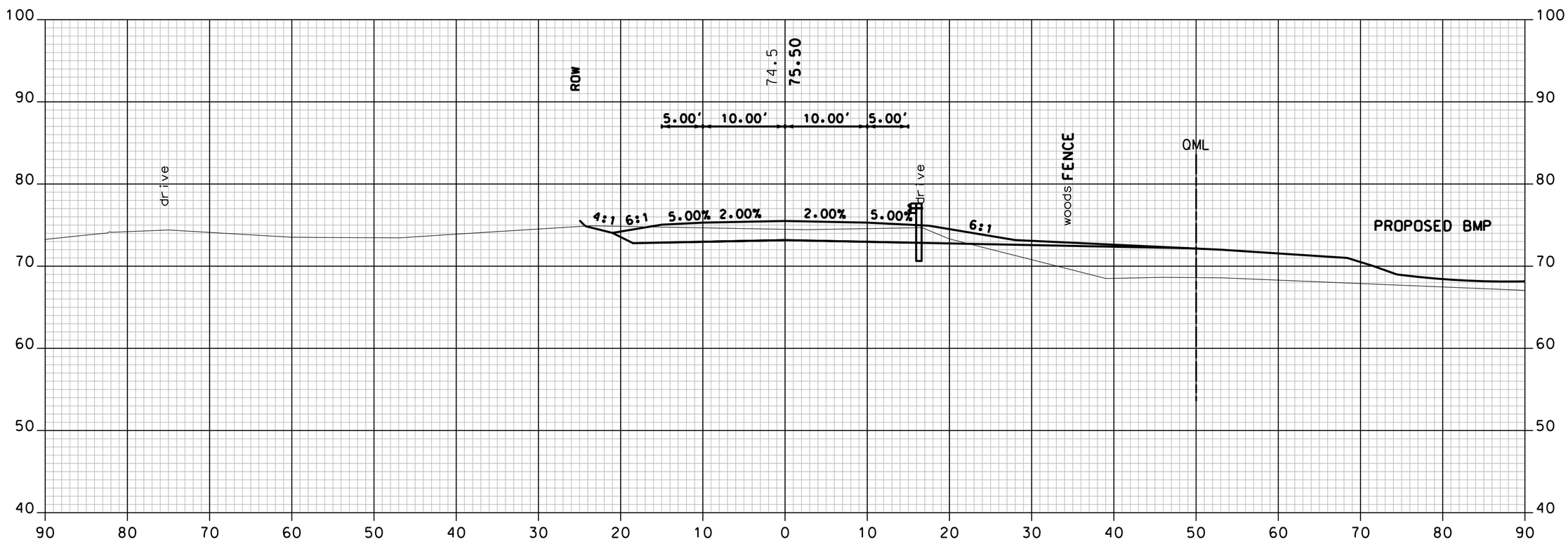
NUMBER	DATE	STATION	STATION	DESCRIPTION



104+00



103+50



103+00

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 424.4 C.Y. ROCK EXCAV. – C.Y.

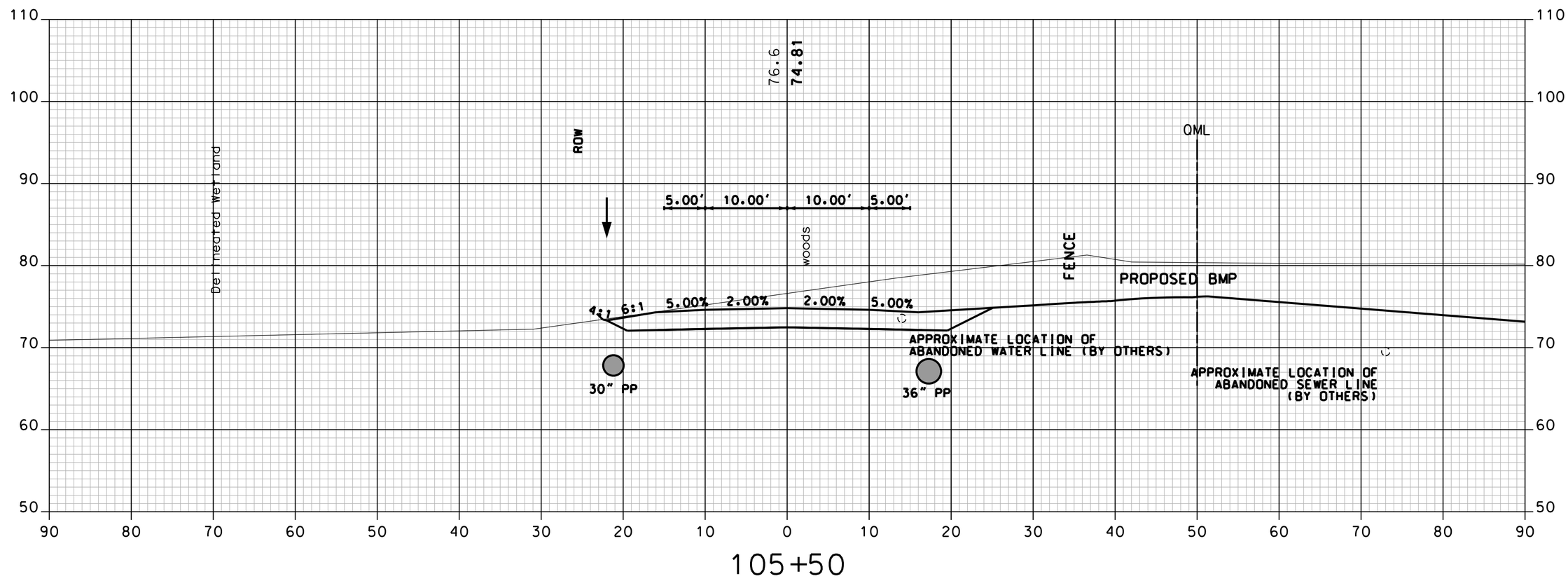
FILL 495.1 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	149	179

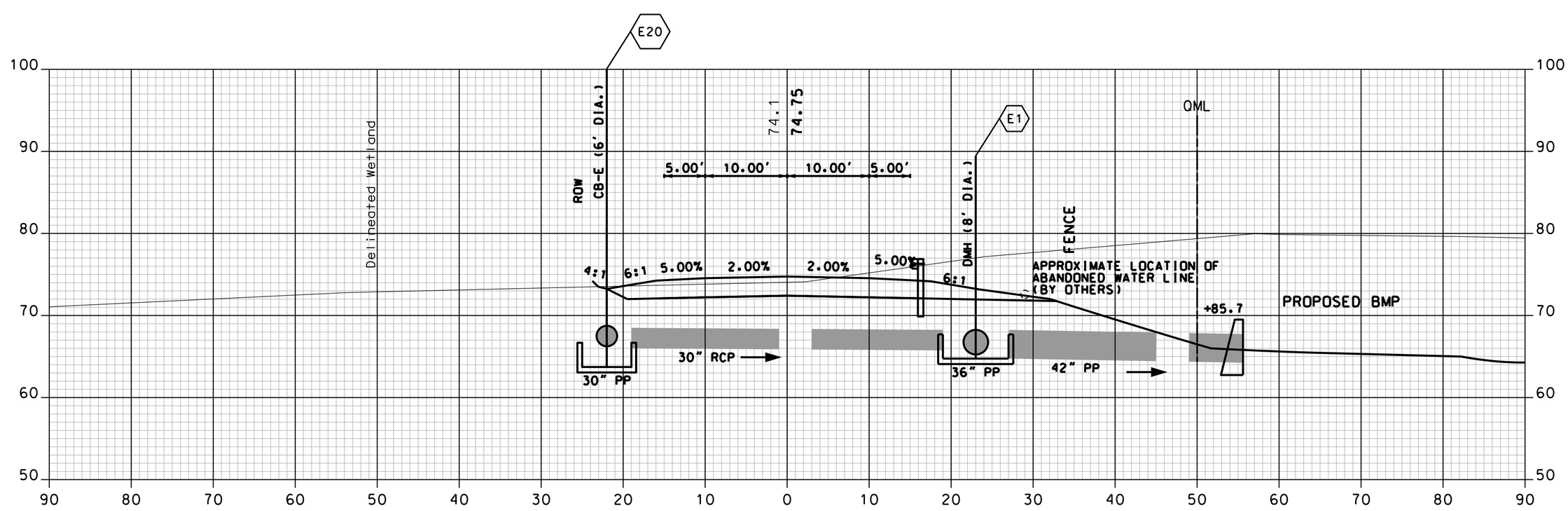
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

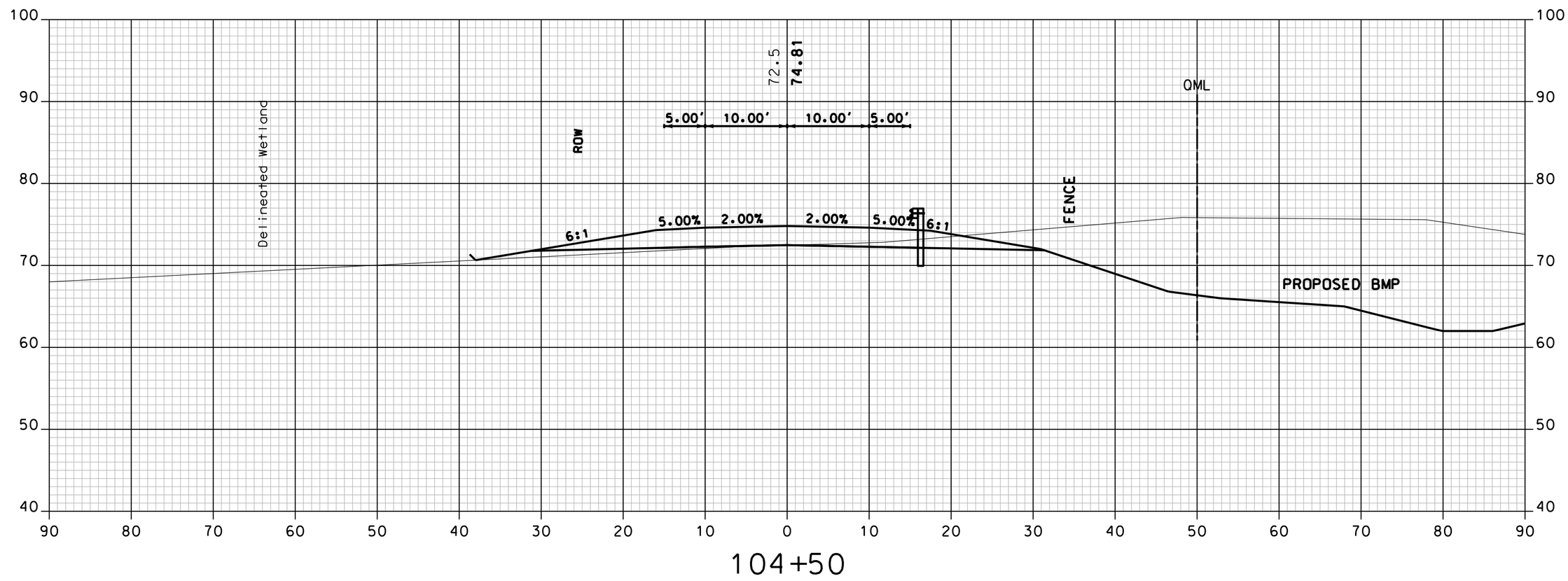
NUMBER	DATE	STATION	STATION	DESCRIPTION



105+50



105+00



104+50

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 1249.6 C.Y. ROCK EXCAV. – C.Y.

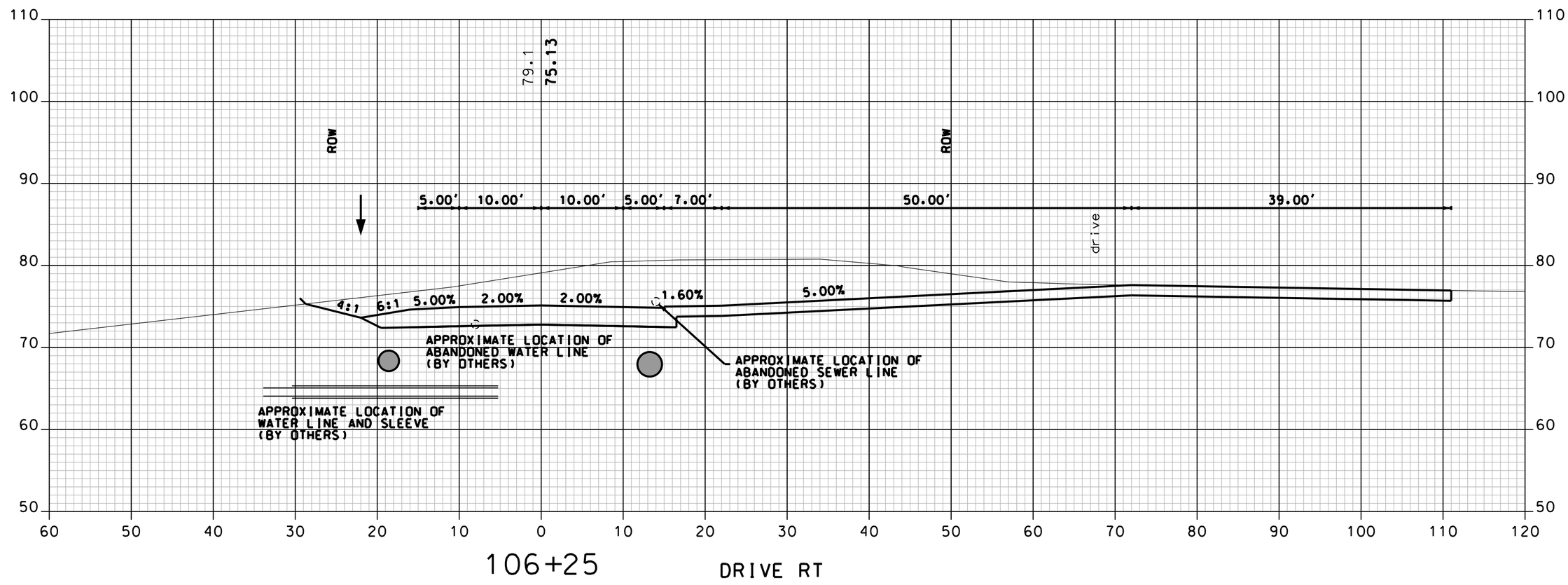
FILL 12.9 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	150	179

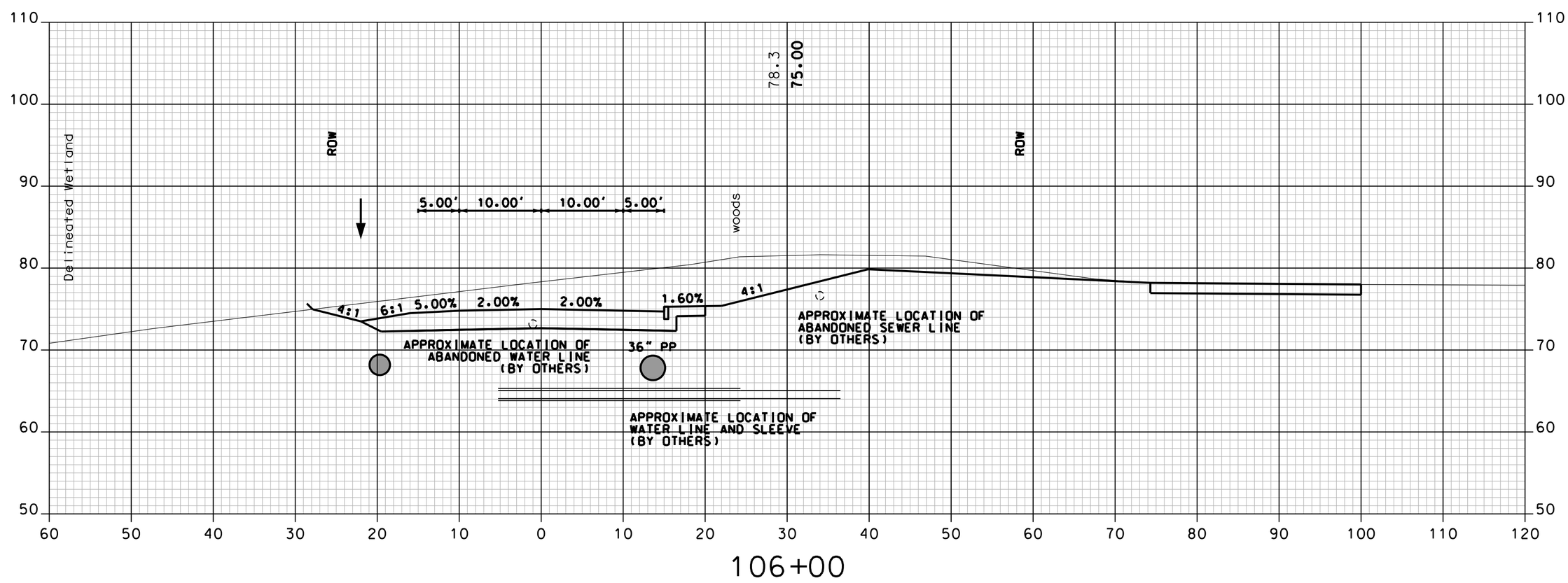
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

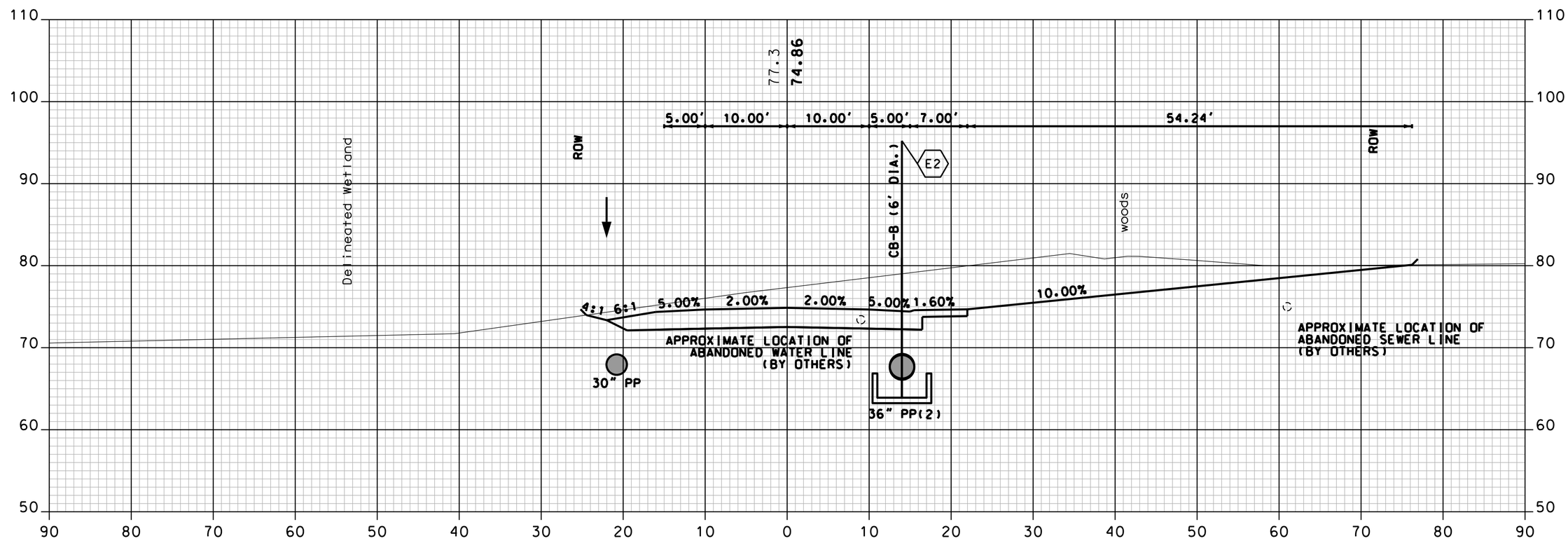
NUMBER	DATE	STATION	STATION	DESCRIPTION



106+25 DRIVE RT



106+00



105+65 DRIVE APRON RT

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 919.6 C.Y. ROCK EXCAV. – C.Y.

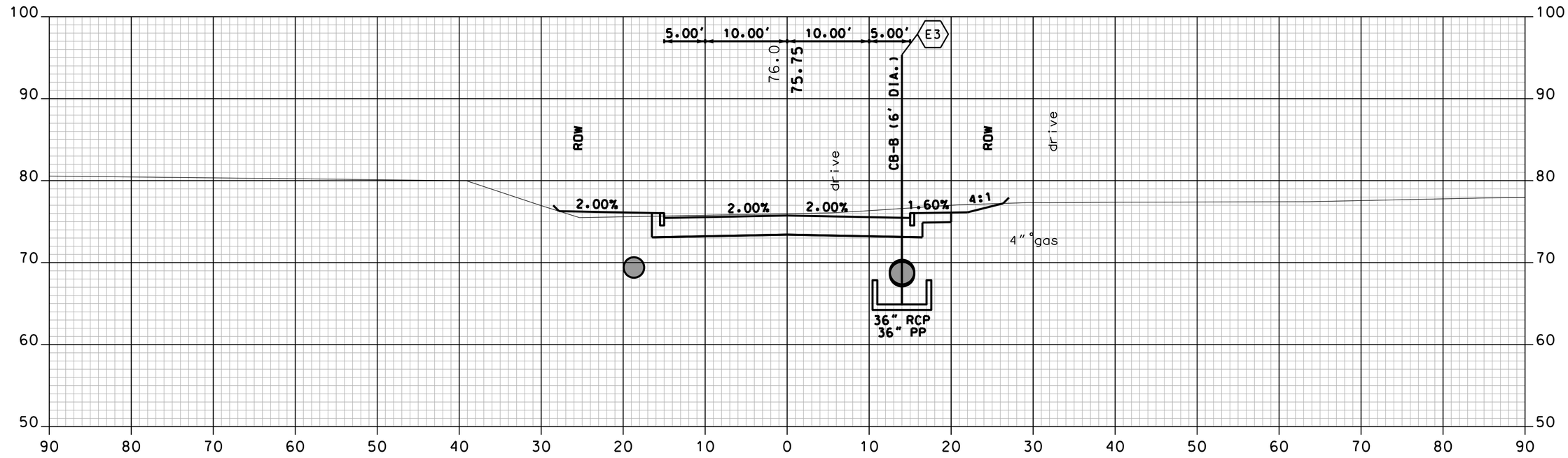
FILL 0.0 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	151	179

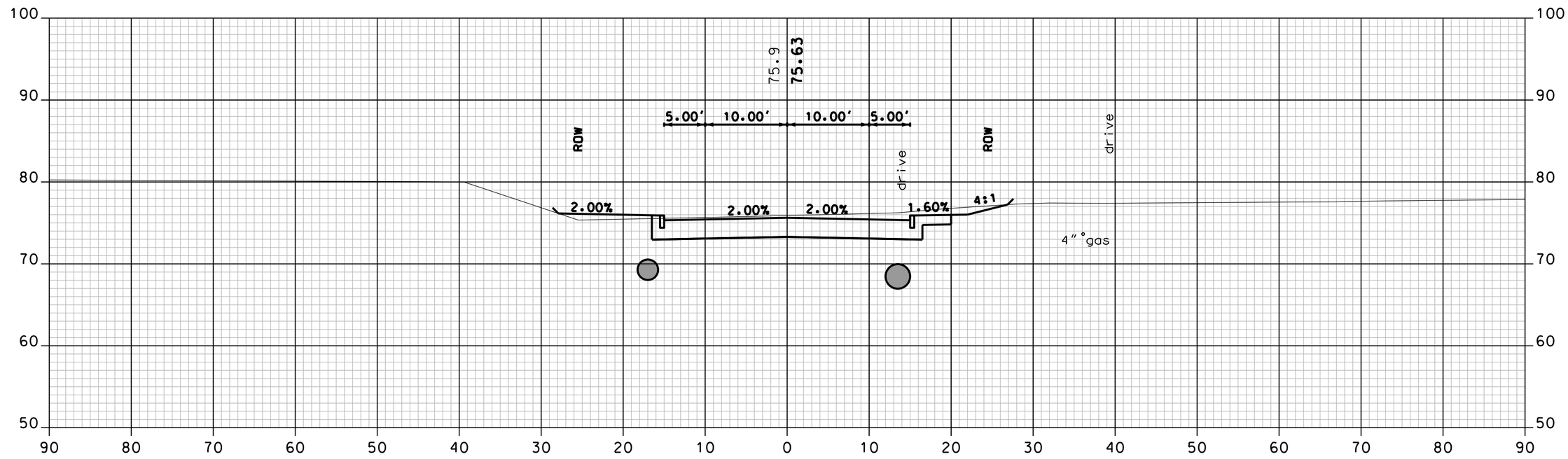
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

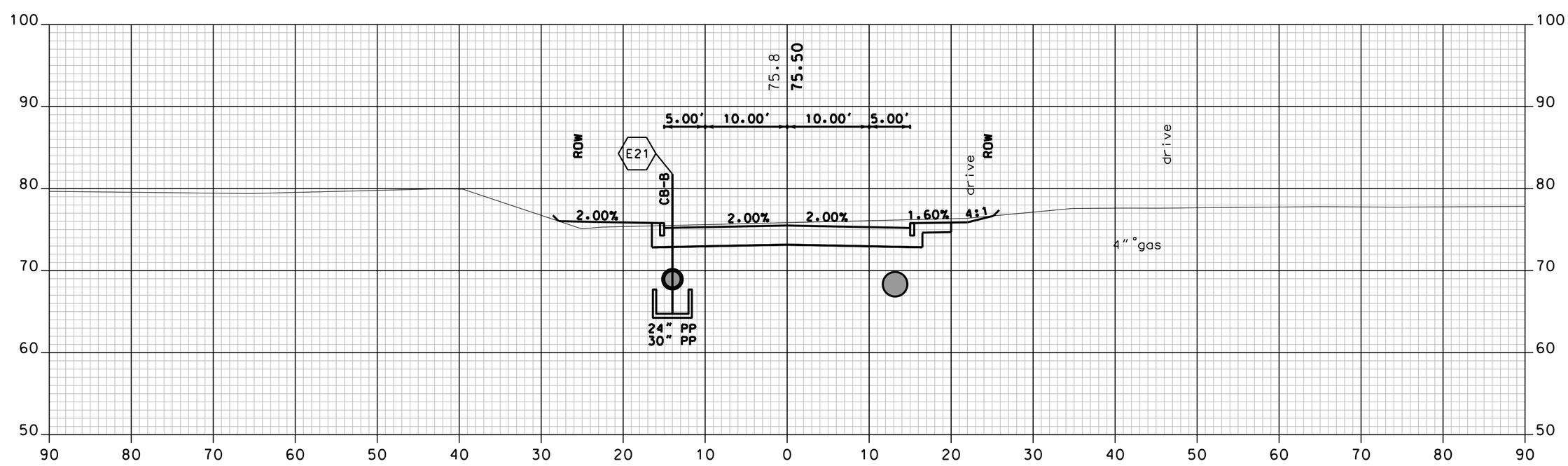
NUMBER	DATE	STATION	STATION	DESCRIPTION



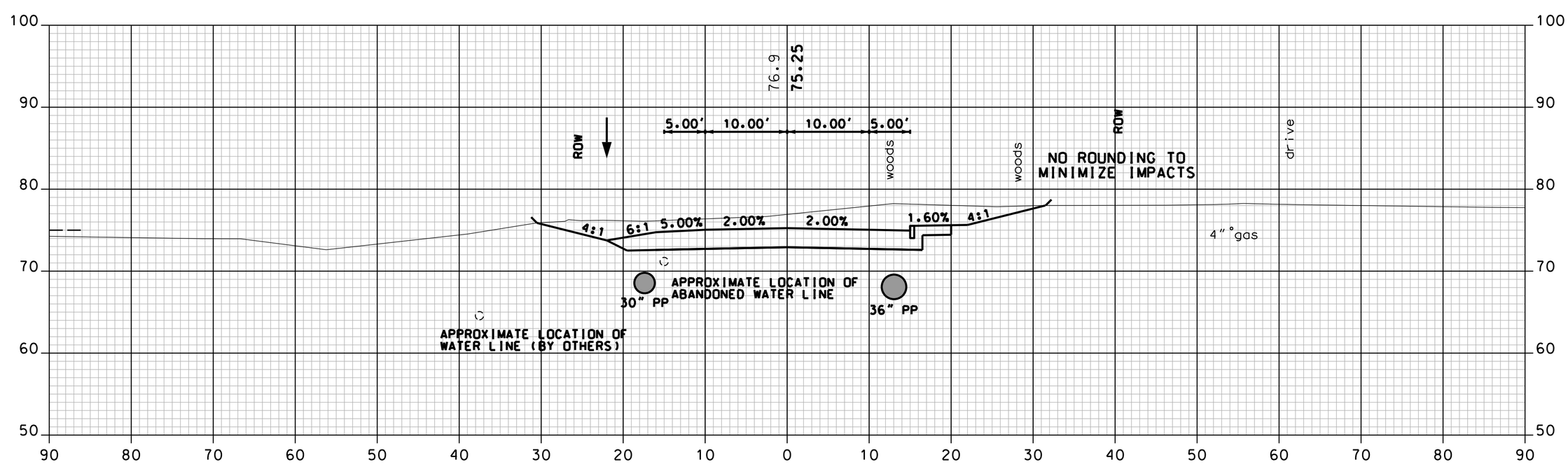
107+50



107+25



107+00



106+50

NOTE: STA. 107+00 TO 108+00, LT
THE EXISTING DETAIL IS A BEST REPRESENTATION
OF THE FUTURE FIELD CONDITIONS BASED ON THE
PROPOSED SEPTIC DESIGN (BY OTHERS) FOR PARCEL 341.

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

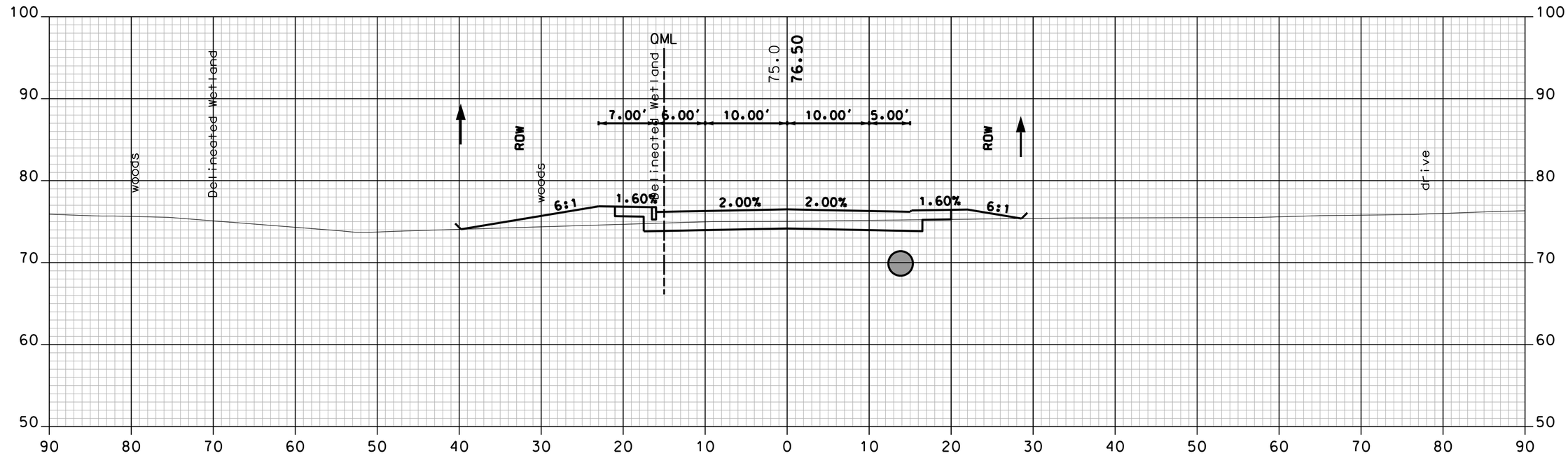
COMMON EXCAV.	657.4 C.Y.	ROCK EXCAV.	- C.Y.
FILL	22.2 C.Y.	MUCK EXCAV.	- C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	152	179

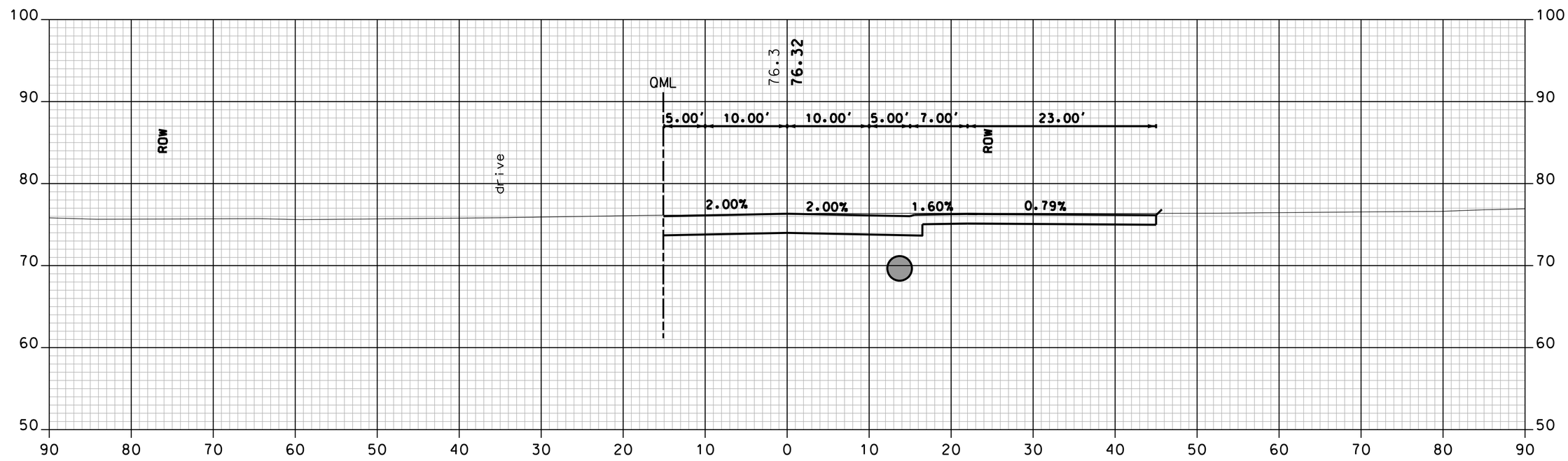
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

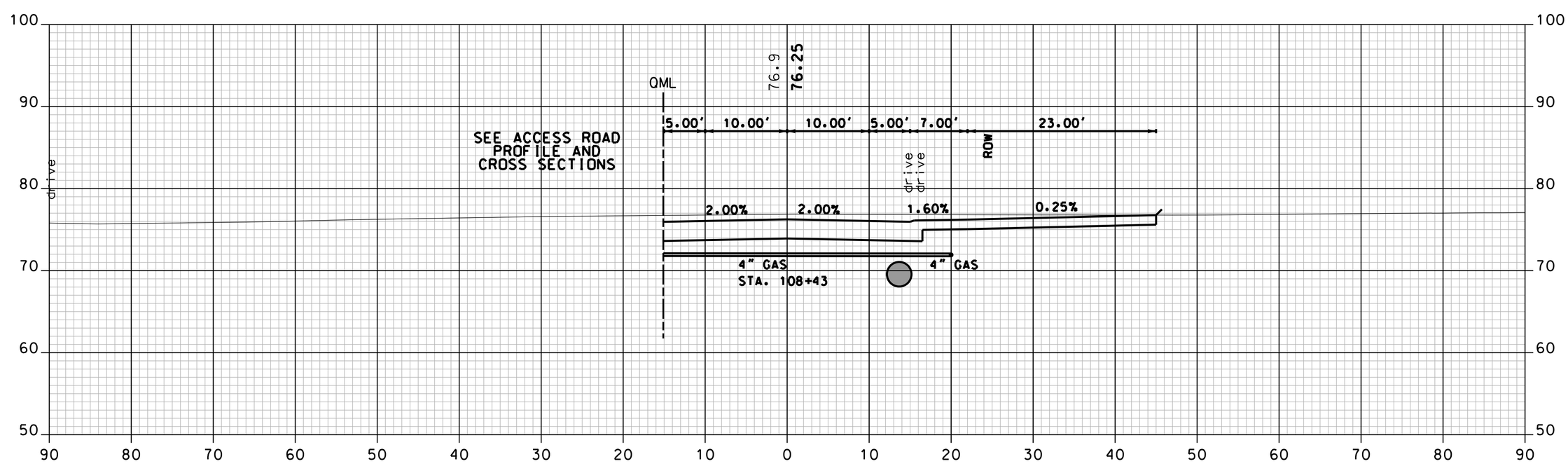
NUMBER	DATE	STATION	STATION	DESCRIPTION



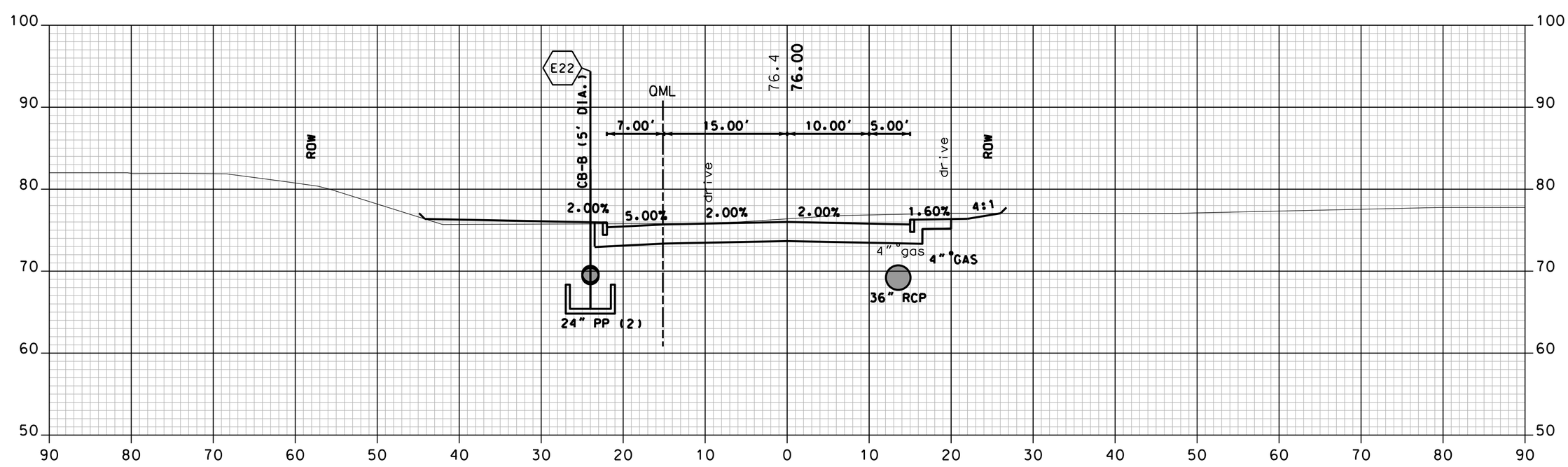
109+00



108+65 DRIVE RT



108+50



108+00

NOTE: STA. 107+00 TO 108+00, LT
THE EXISTING DETAIL IS A BEST REPRESENTATION
OF THE FUTURE FIELD CONDITIONS BASED ON THE
PROPOSED SEPTIC DESIGN (BY OTHERS) FOR PARCEL 341.

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

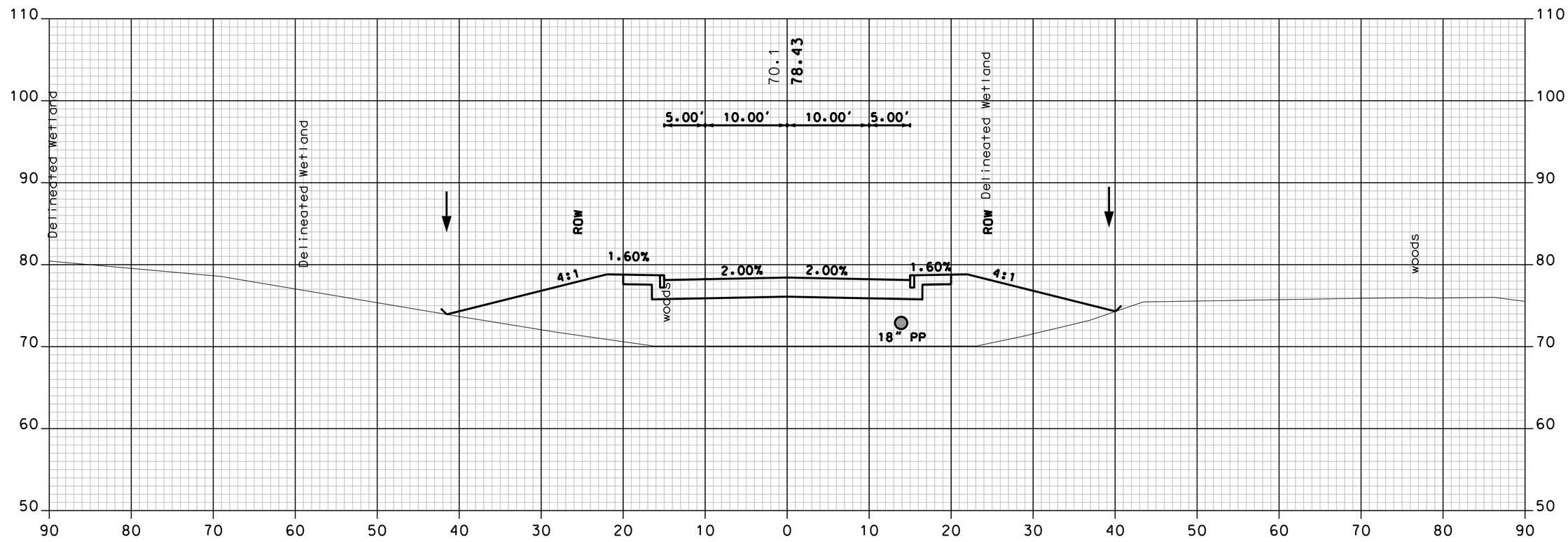
COMMON EXCAV.	414.7 C.Y.	ROCK EXCAV.	- C.Y.
FILL	342.8 C.Y.	MUCK EXCAV.	- C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	153	179

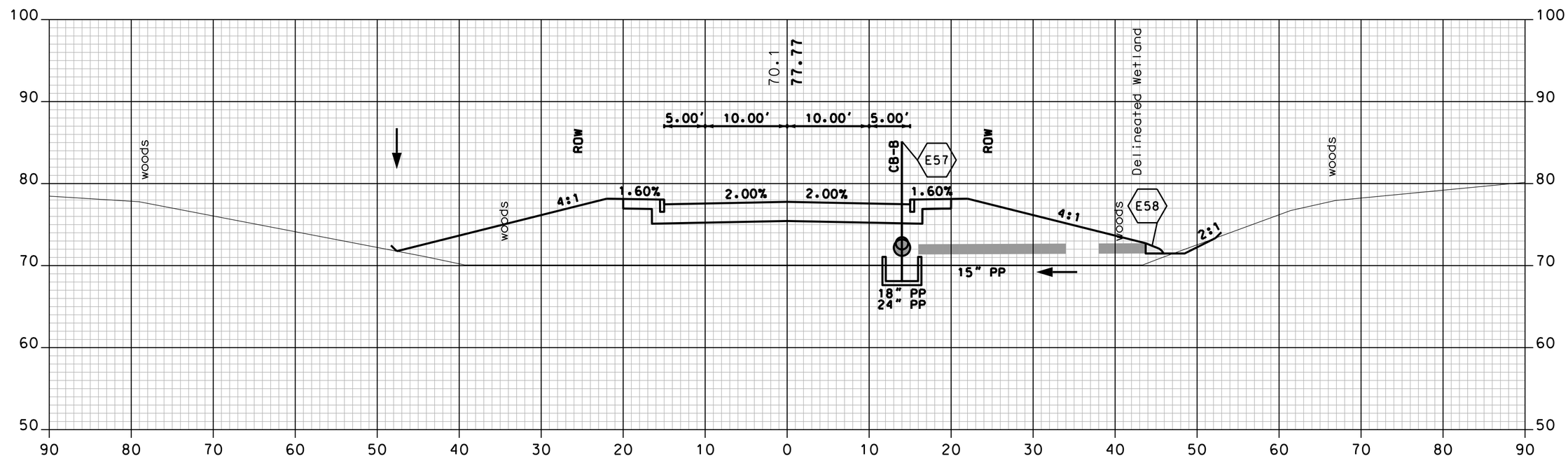
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

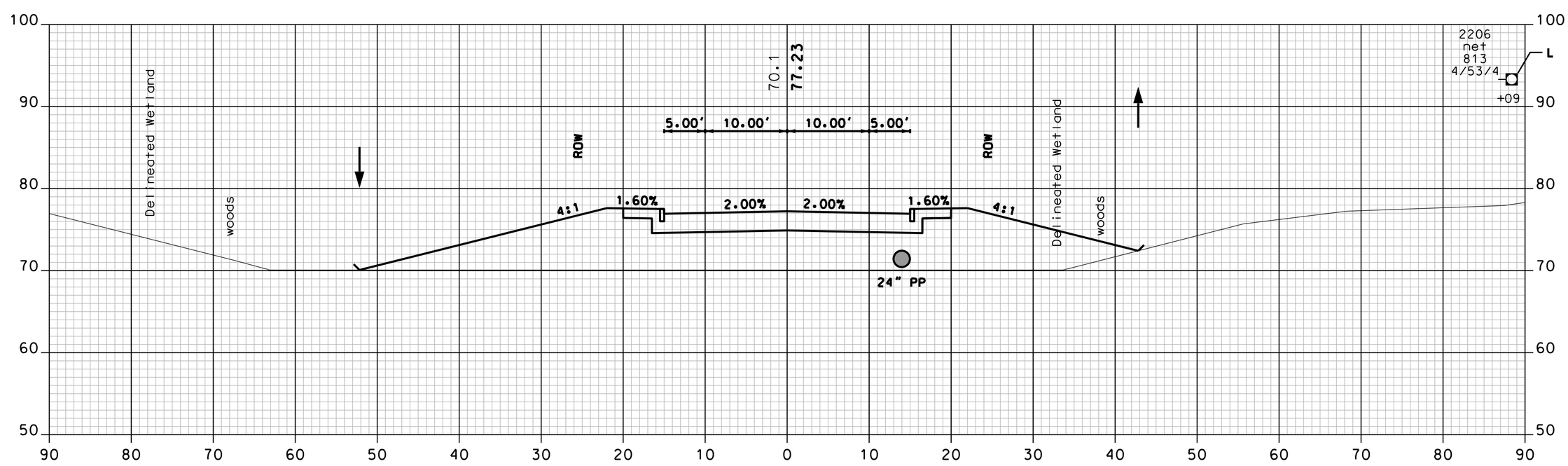
NUMBER	DATE	STATION	STATION	DESCRIPTION



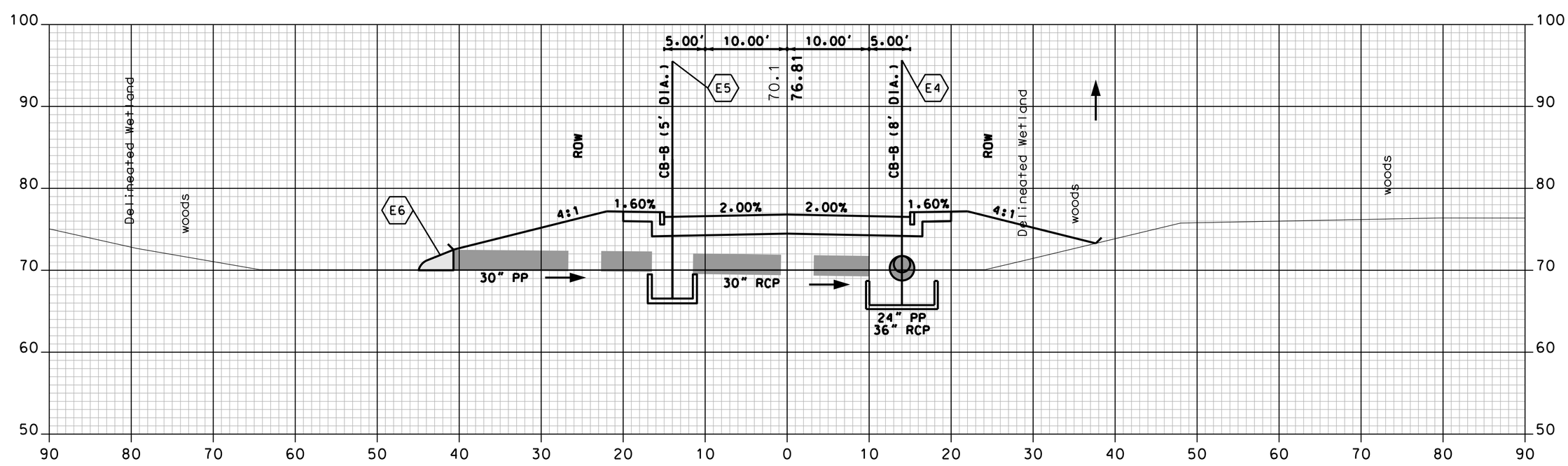
111+00



110+50



110+00



109+50

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 2.4 C.Y. ROCK EXCAV. – C.Y.

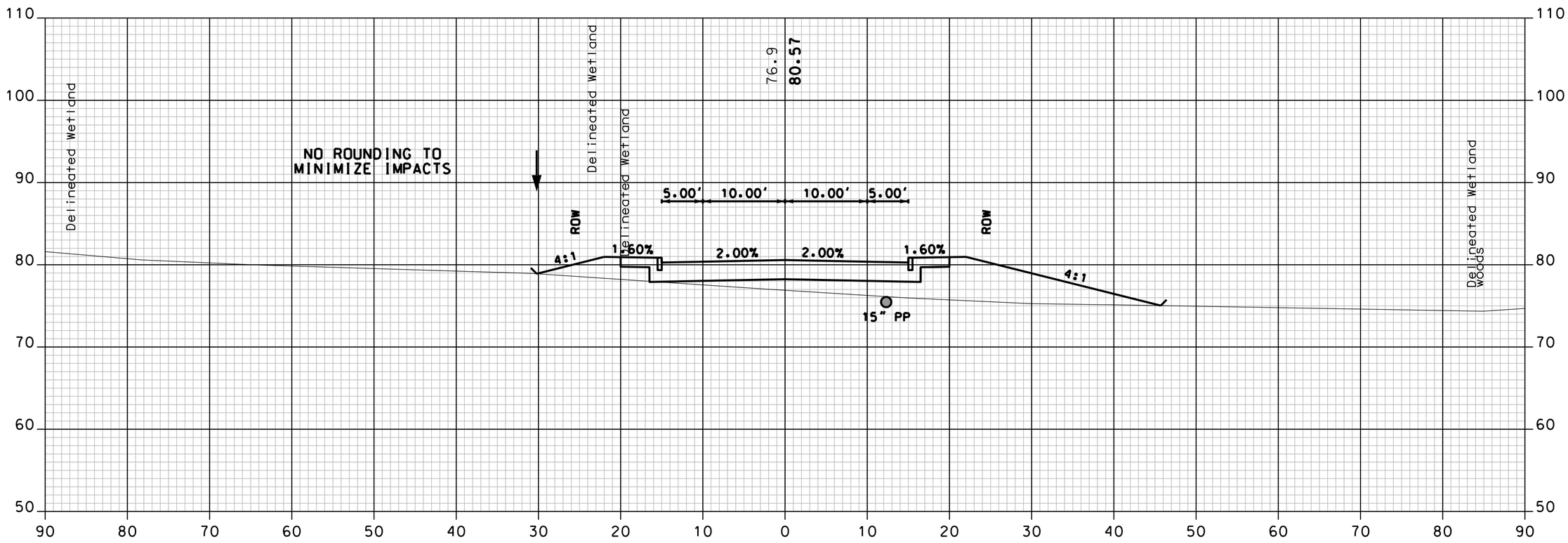
FILL 2939.4 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	154	179

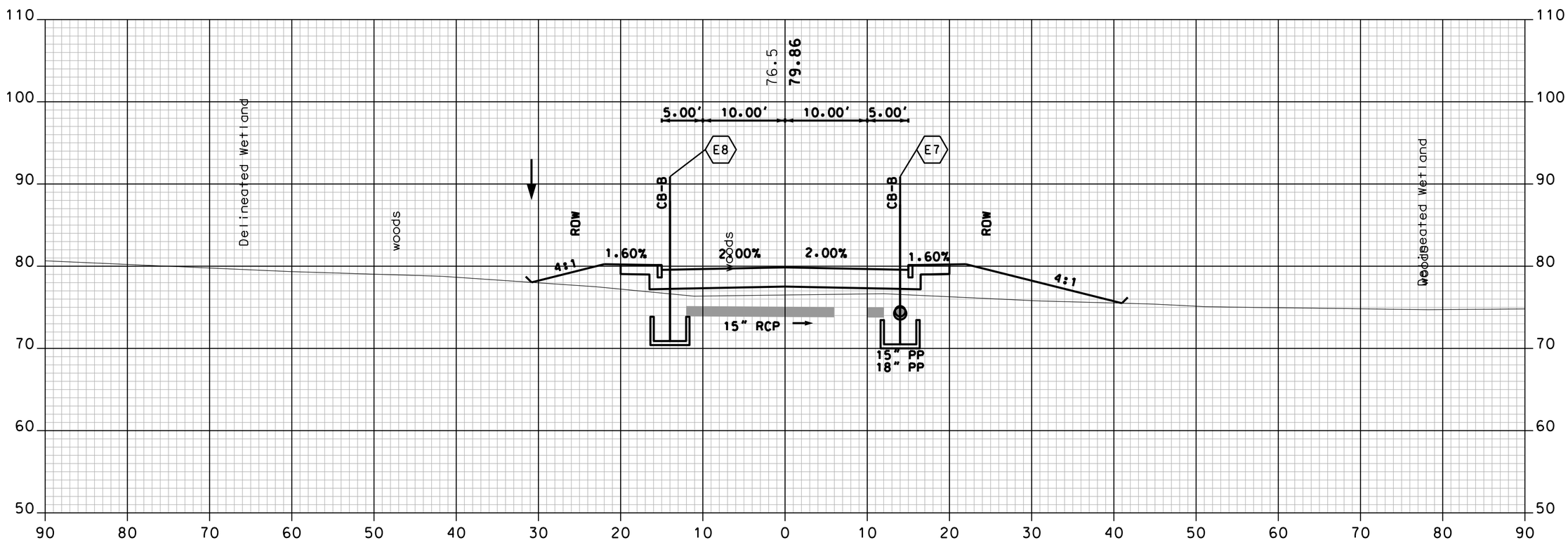
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

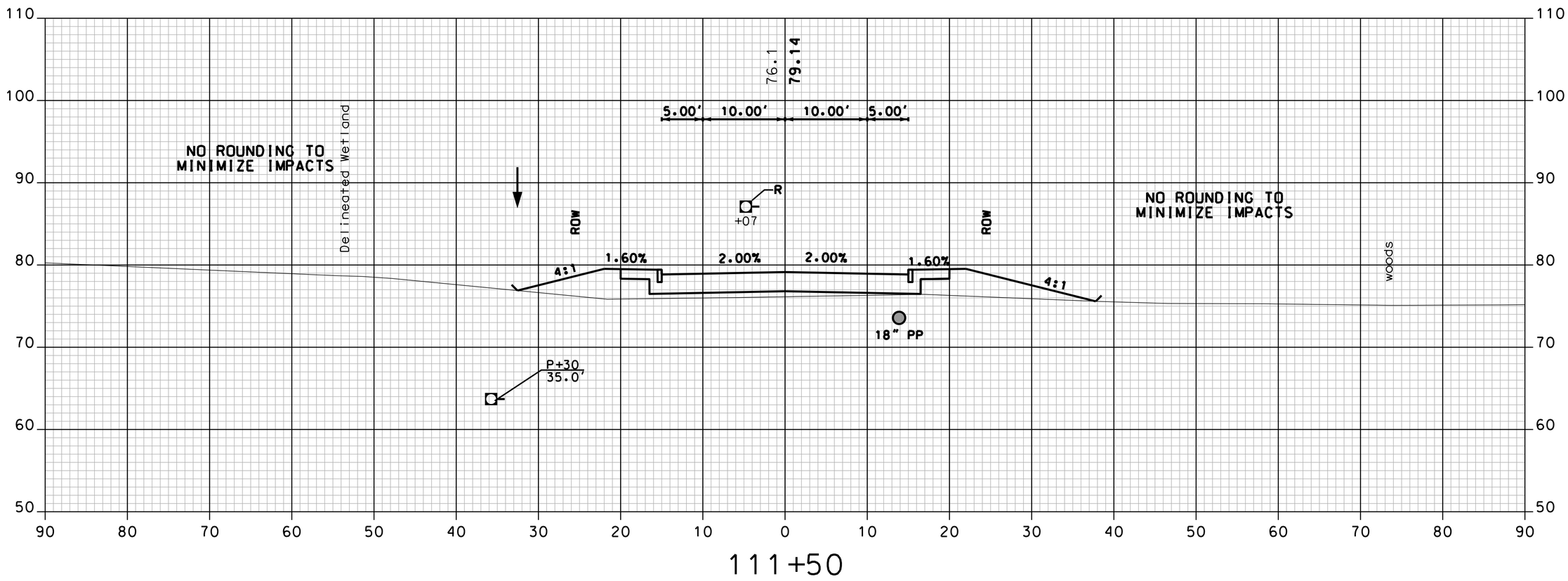
NUMBER	DATE	STATION	STATION	DESCRIPTION



112+50



112+00



111+50

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

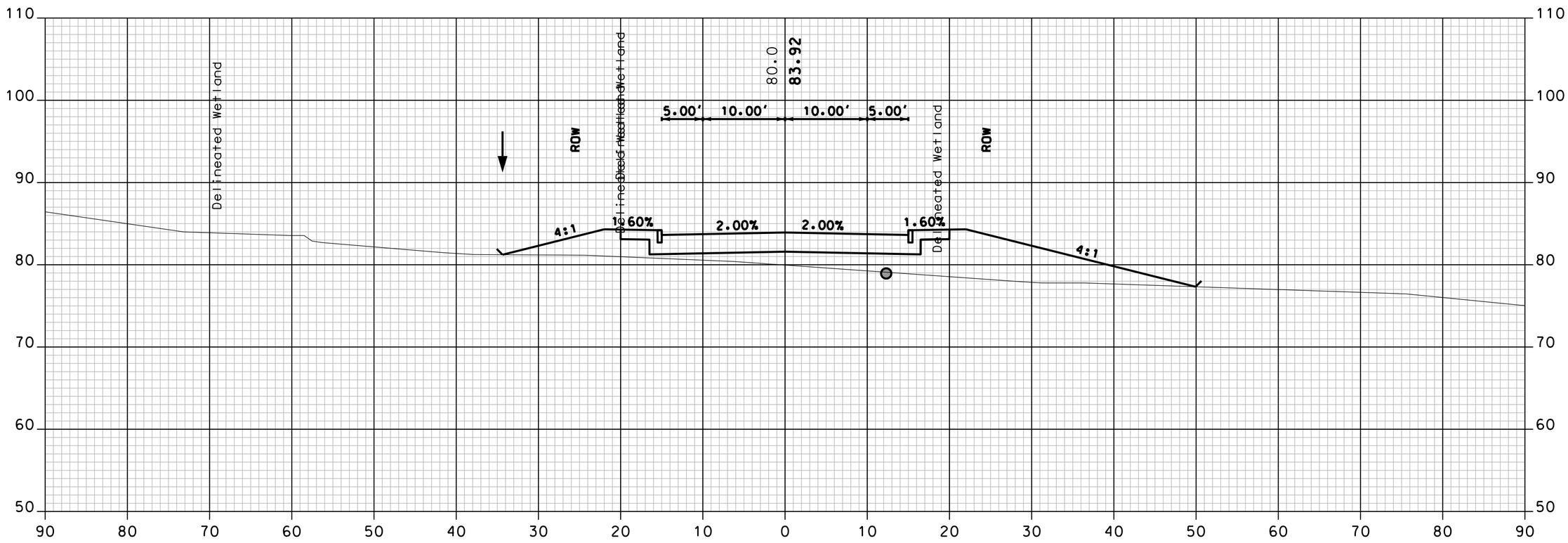
COMMON EXCAV.	0.0 C.Y.	ROCK EXCAV.	– C.Y.
FILL	739.4 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	155	179

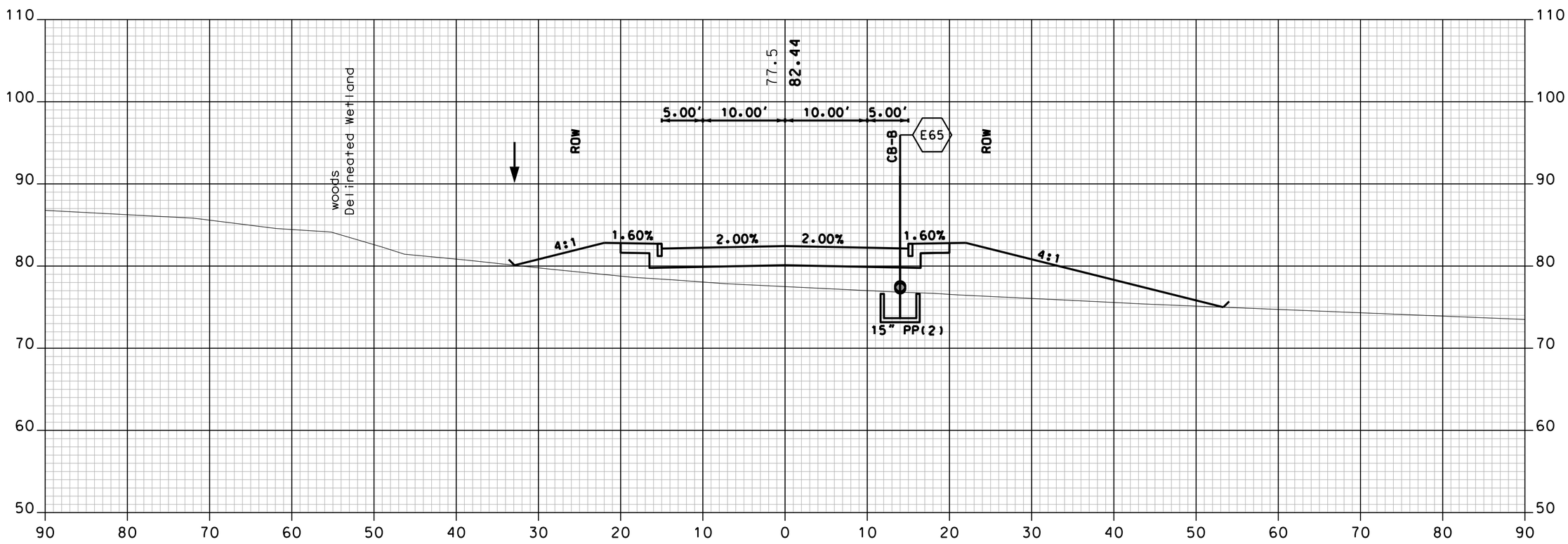
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

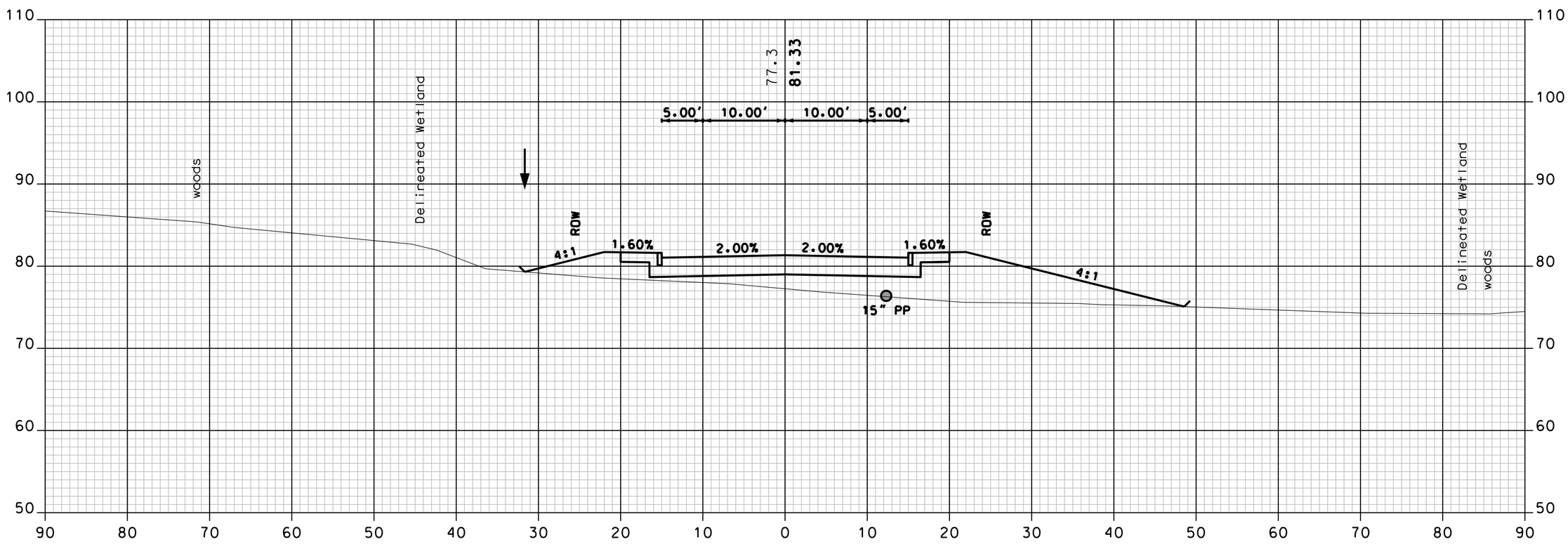
NUMBER	DATE	STATION	STATION	DESCRIPTION



114+00



113+50



113+00

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 0.9 C.Y. ROCK EXCAV. – C.Y.

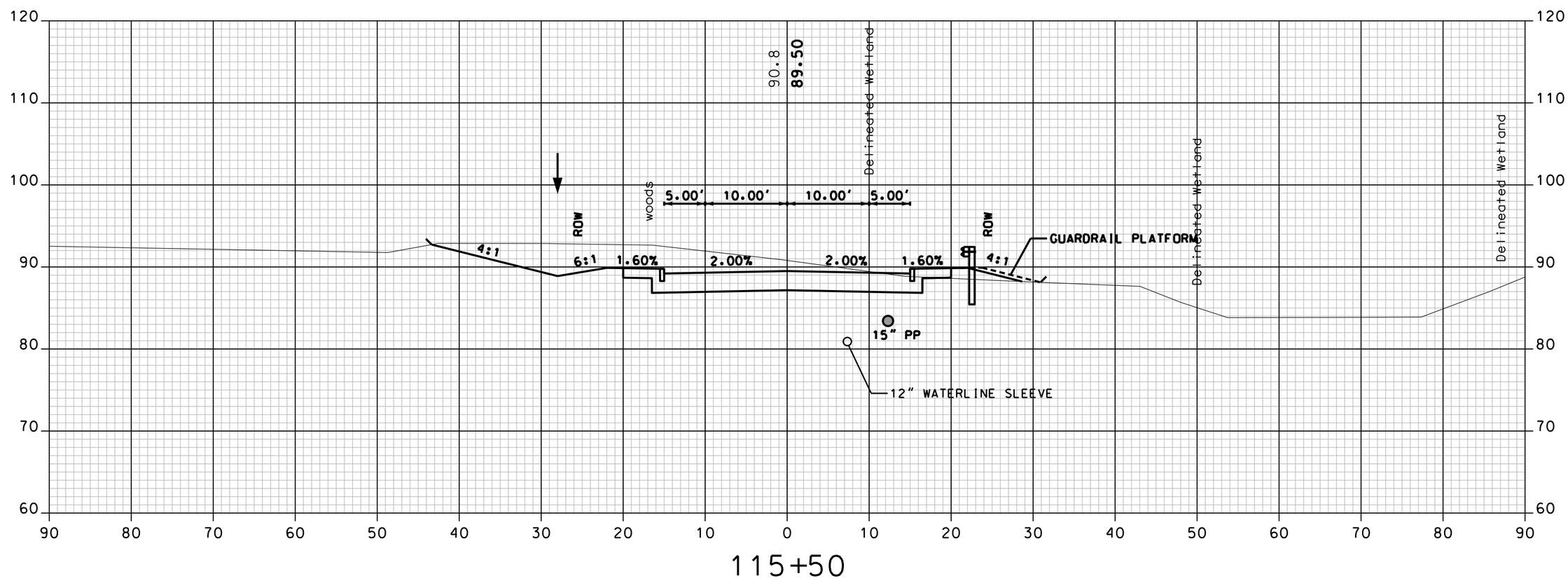
FILL 1110.0 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	156	179

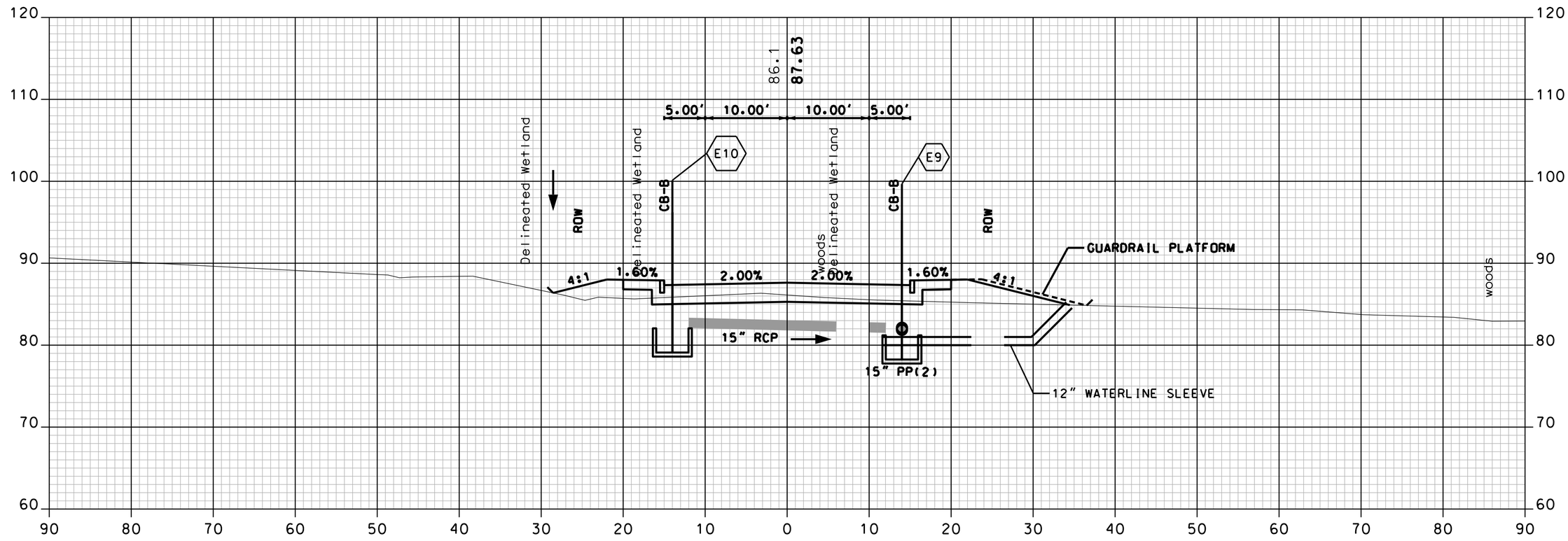
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

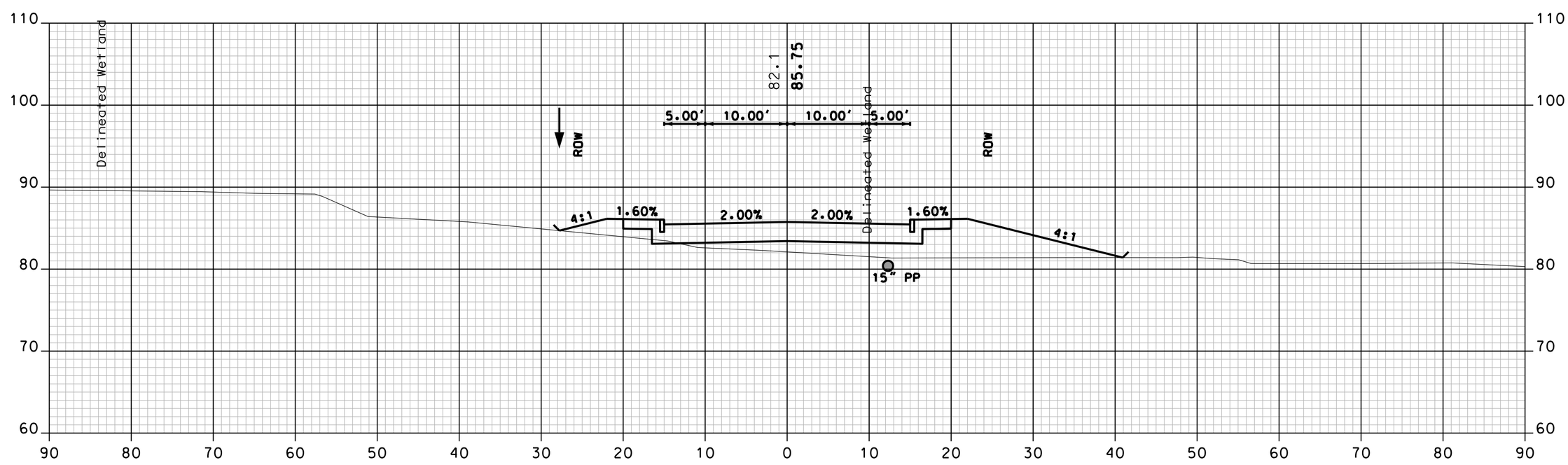
NUMBER	DATE	STATION	STATION	DESCRIPTION



115+50



115+00



114+50

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 719.8 C.Y. ROCK EXCAV. – C.Y.

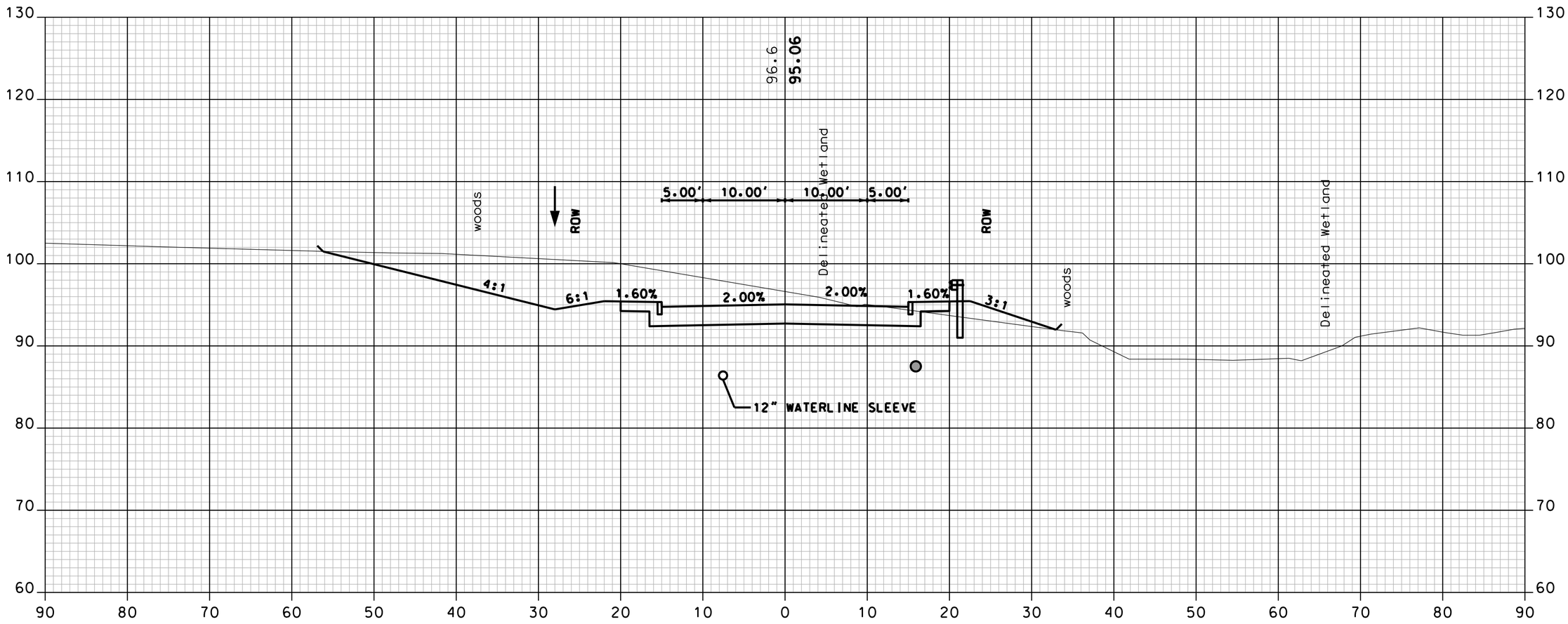
FILL 218.9 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	157	179

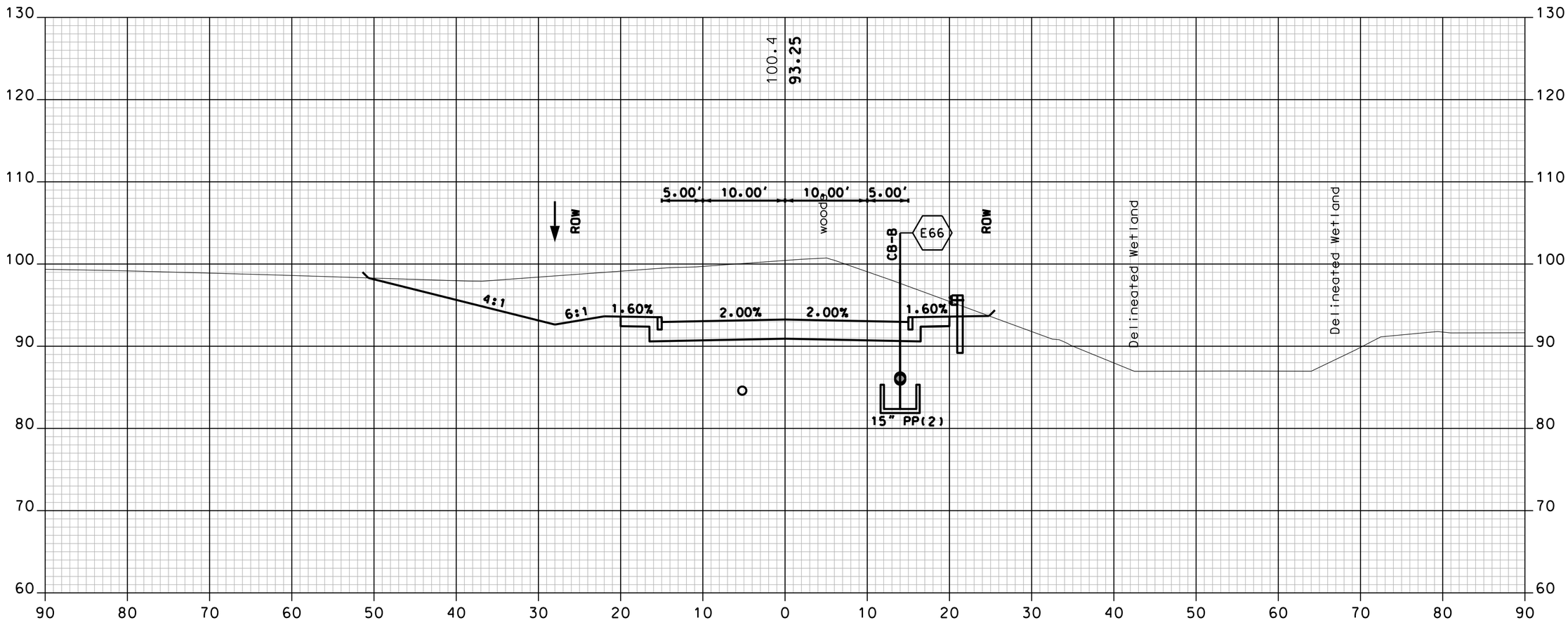
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

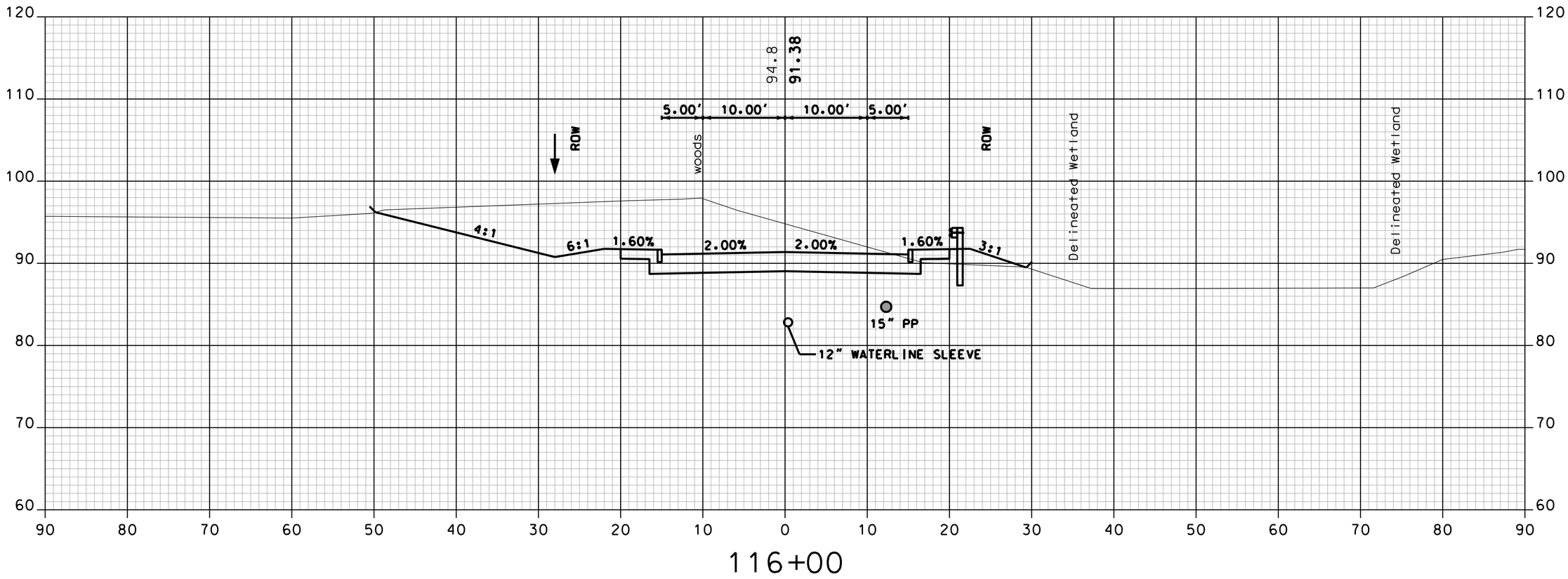
NUMBER	DATE	STATION	STATION	DESCRIPTION



117+00



116+50



116+00

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 1756.6 C.Y. ROCK EXCAV. – C.Y.

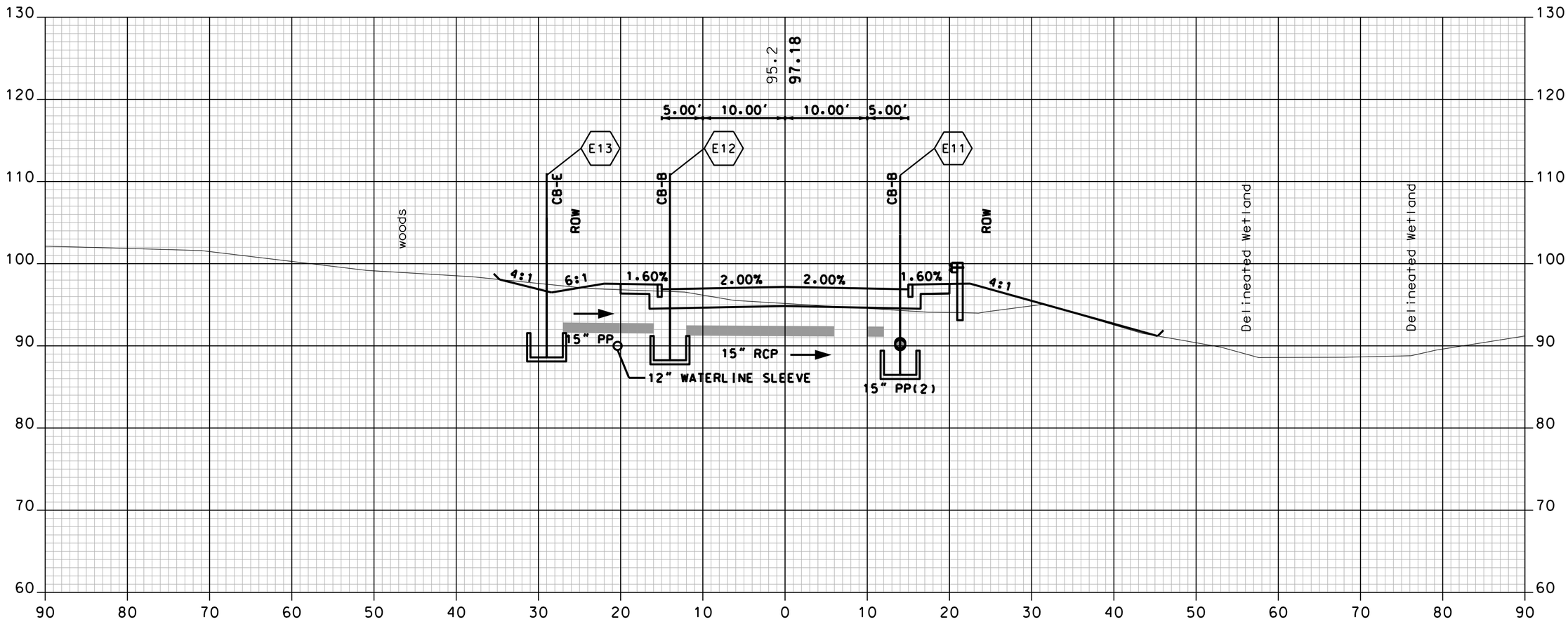
FILL 113.0 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	158	179

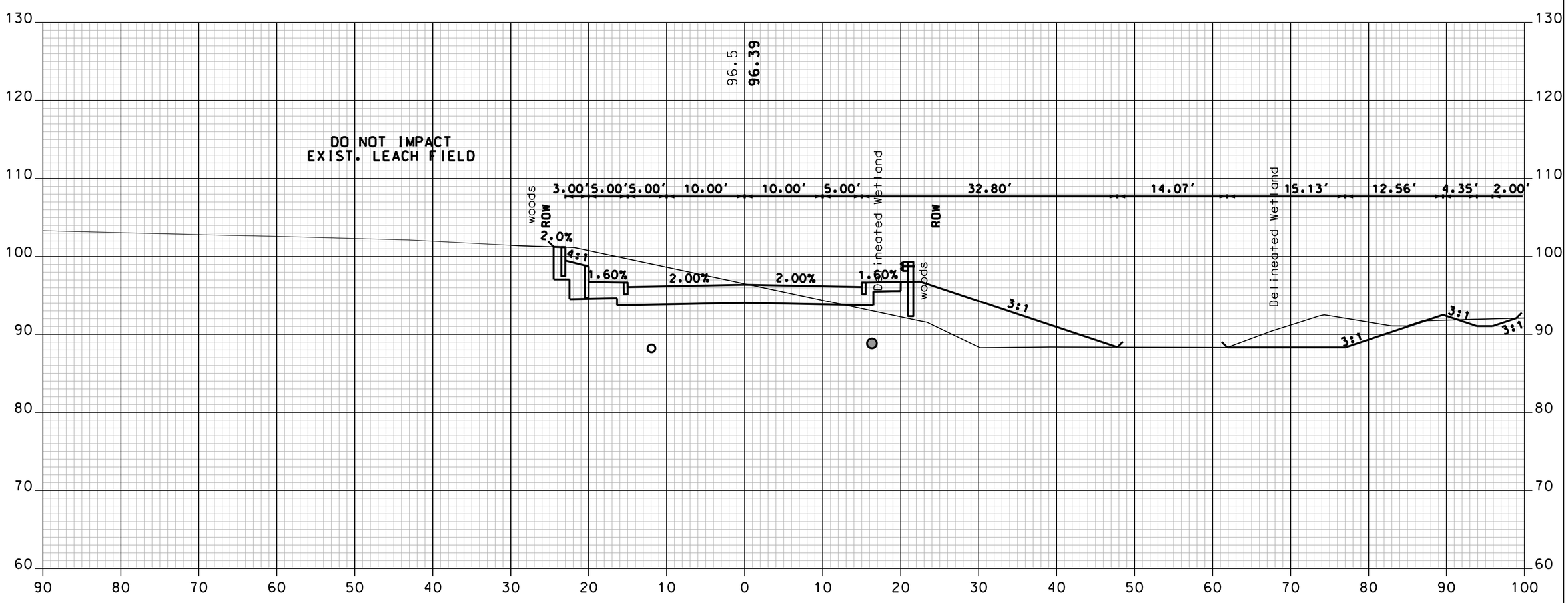
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

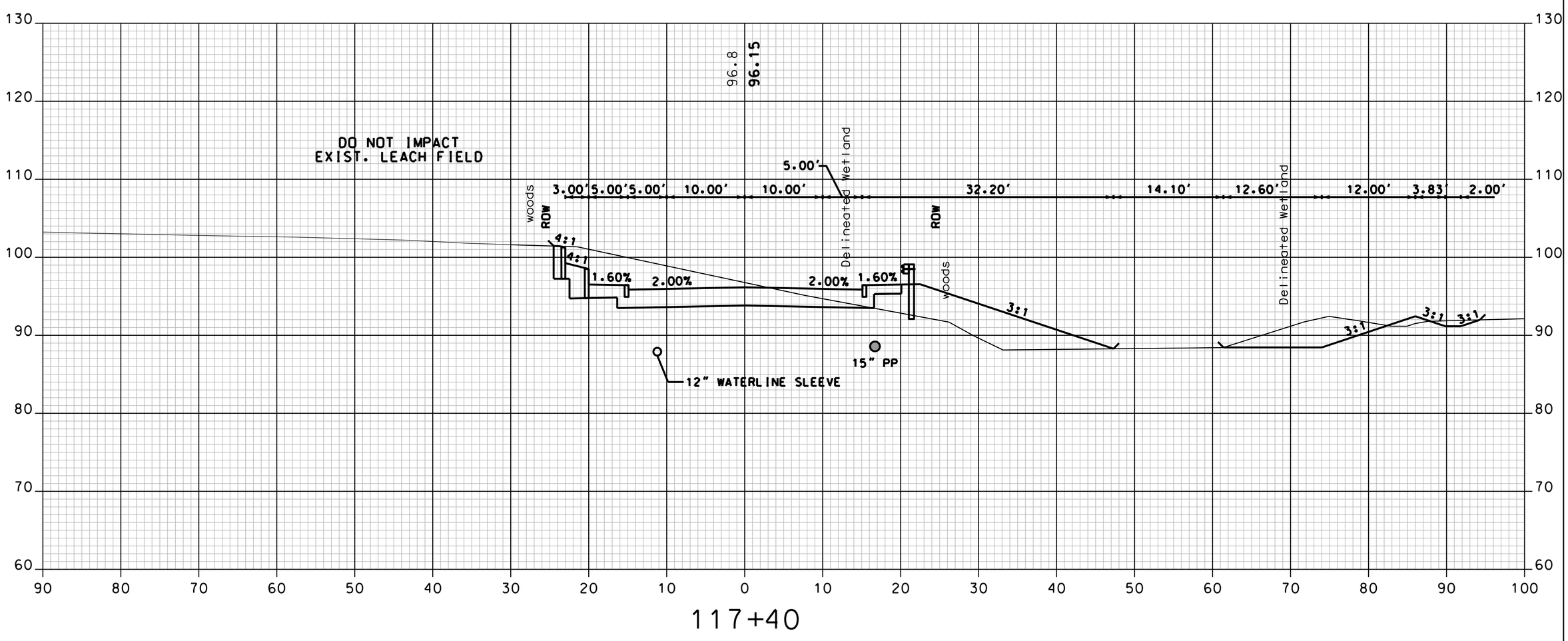
NUMBER	DATE	STATION	STATION	DESCRIPTION



118+00



117+50



117+40

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

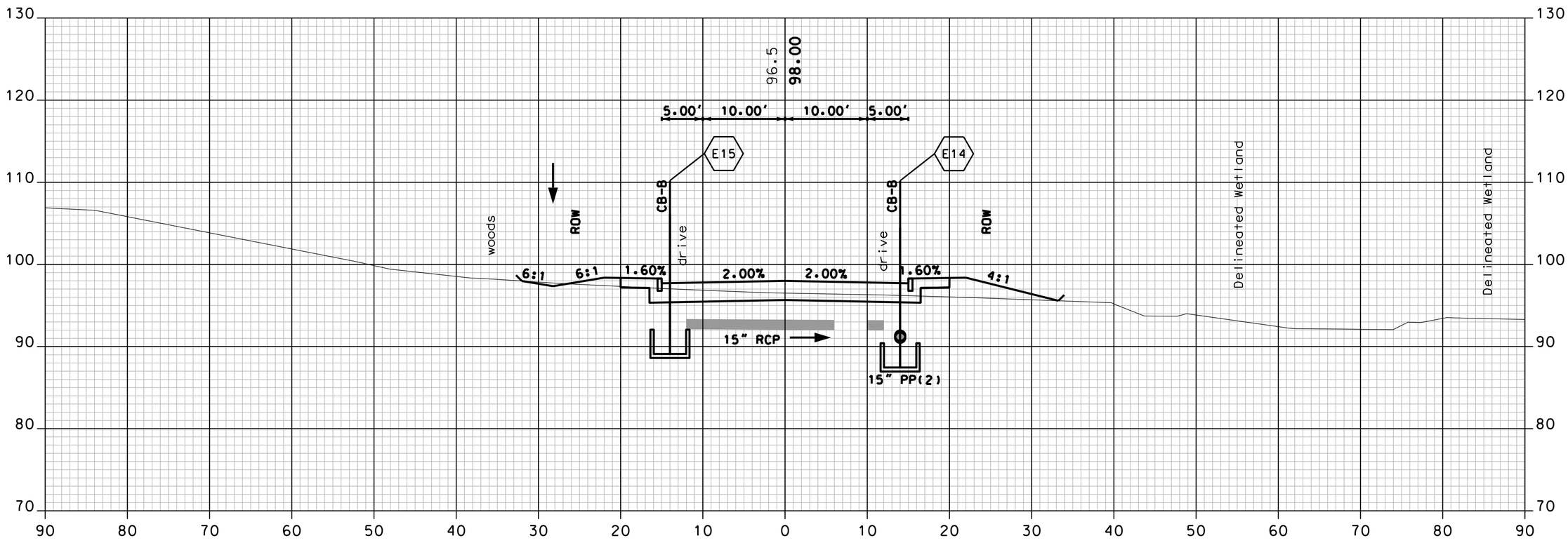
COMMON EXCAV.	341.0 C.Y.	ROCK EXCAV.	- C.Y.
FILL	250.9 C.Y.	MUCK EXCAV.	- C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	159	179

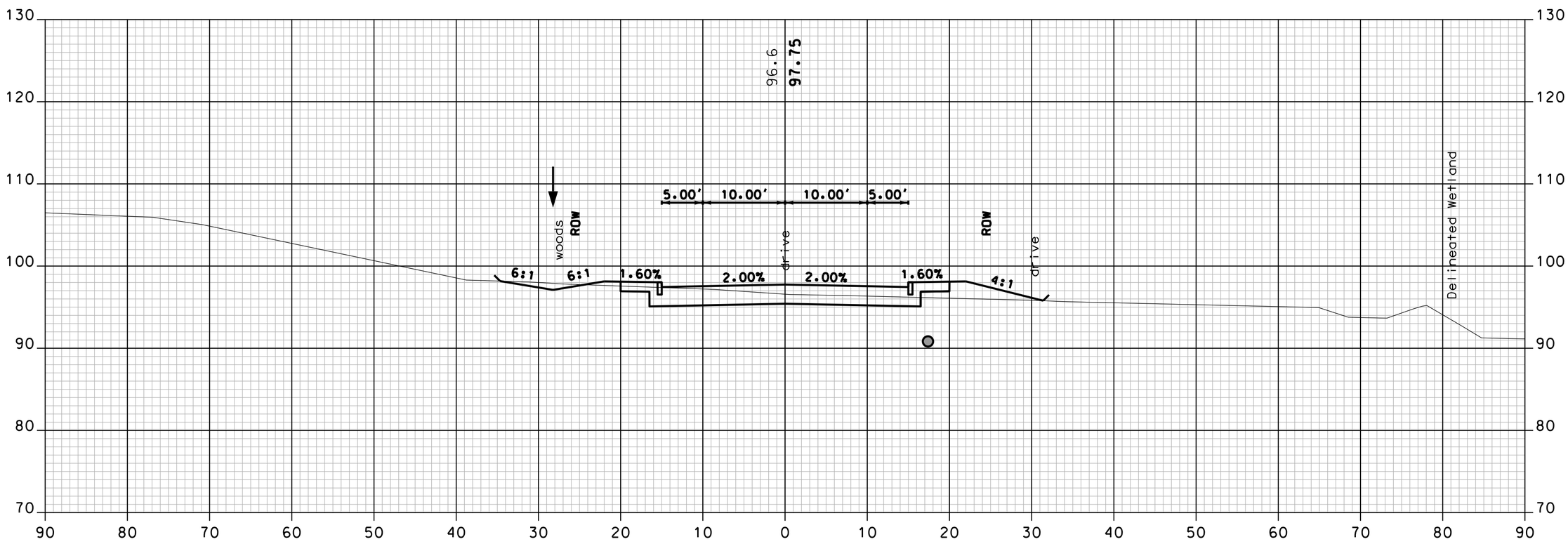
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

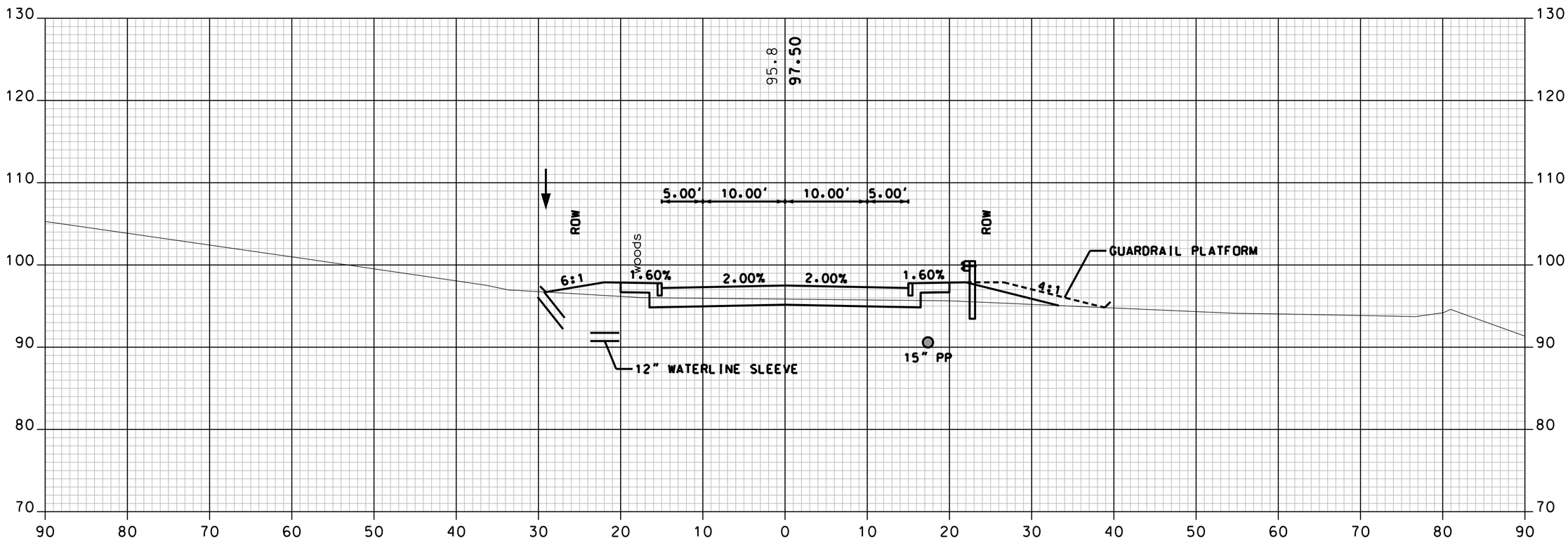
NUMBER	DATE	STATION	STATION	DESCRIPTION



119+50



119+00



118+50

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

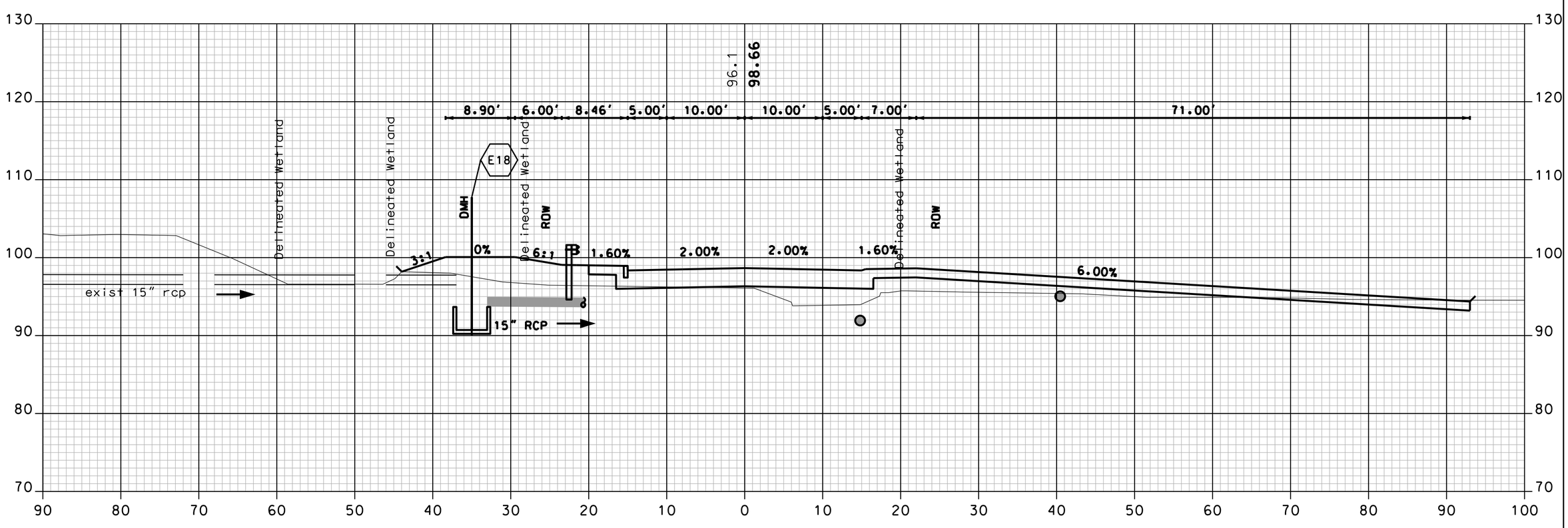
COMMON EXCAV.	206.9 C.Y.	ROCK EXCAV.	– C.Y.
FILL	199.2 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	160	179

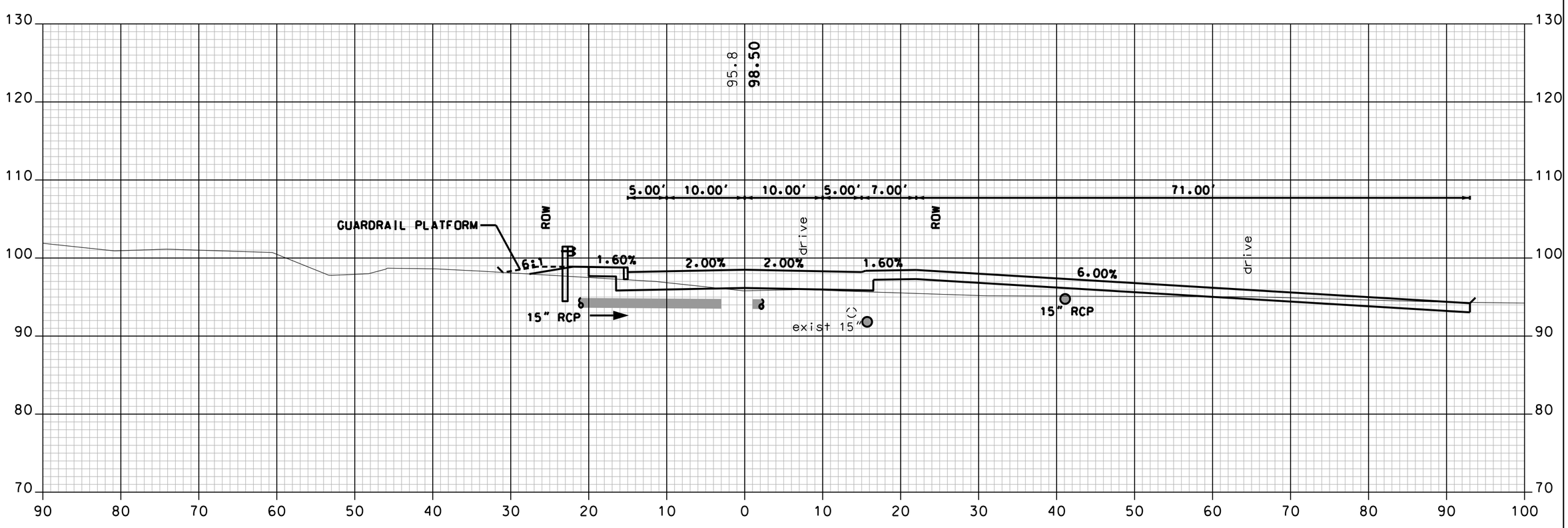
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

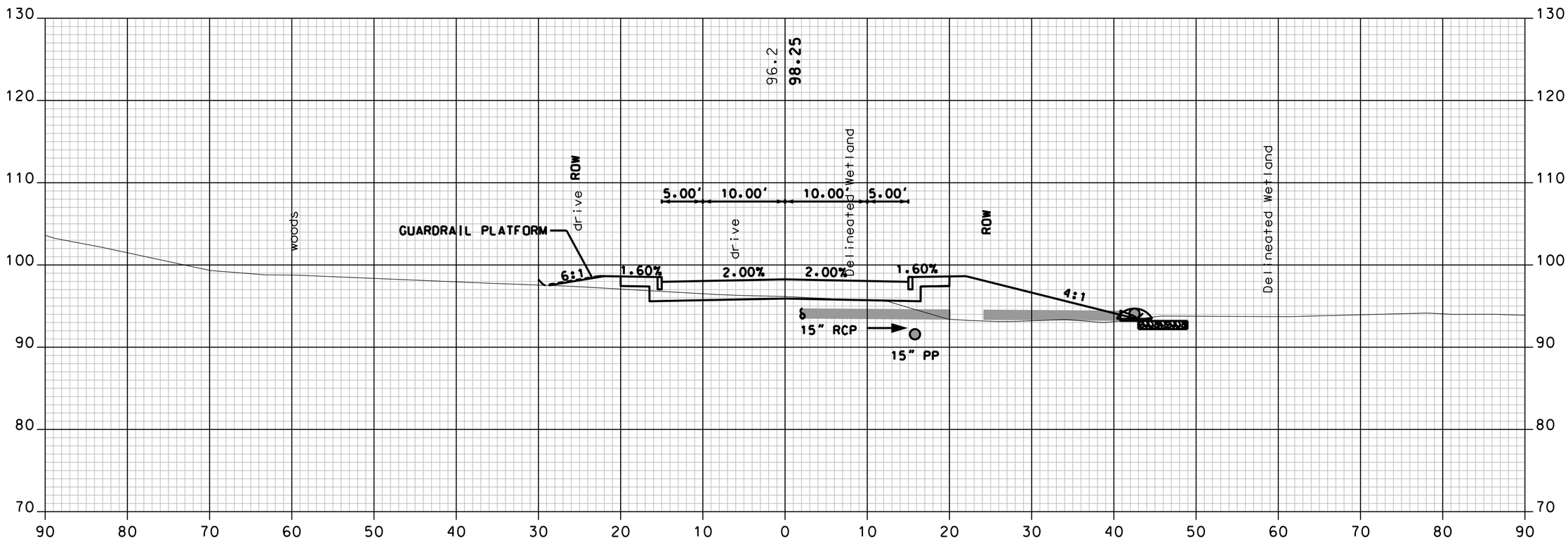
NUMBER	DATE	STATION	STATION	DESCRIPTION



120+70 DRIVE RT



120+50



120+00

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 29.9 C.Y. ROCK EXCAV. – C.Y.

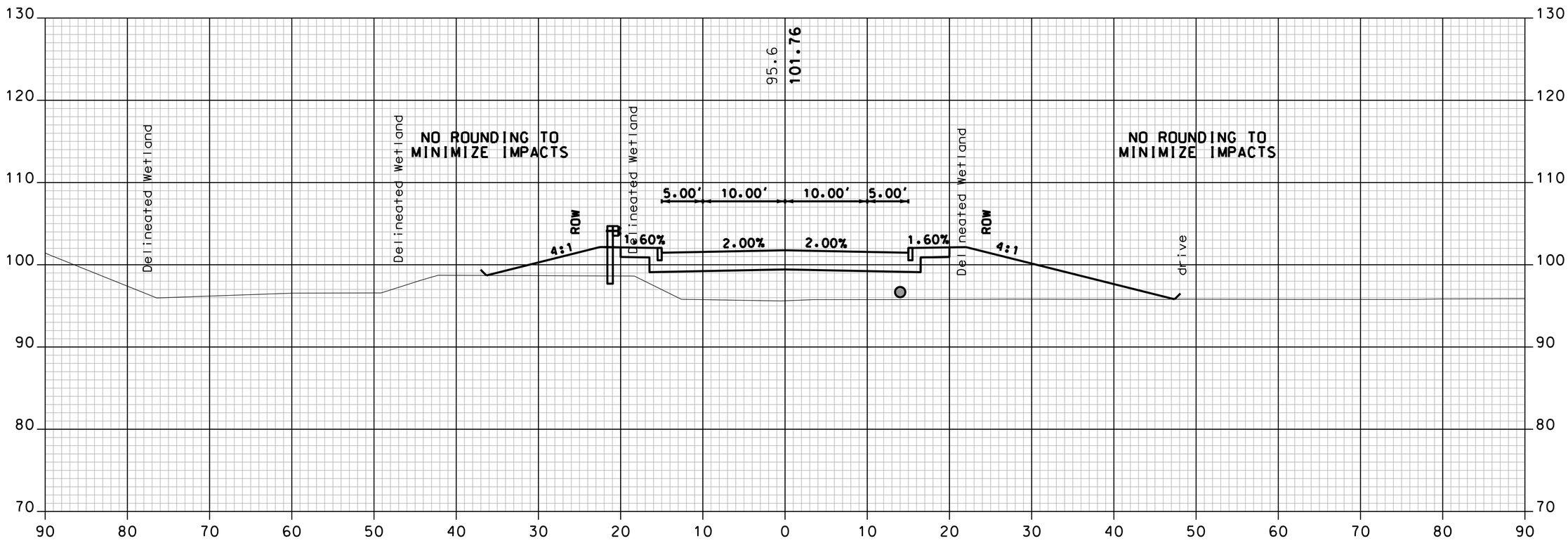
FILL 248.1 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	161	179

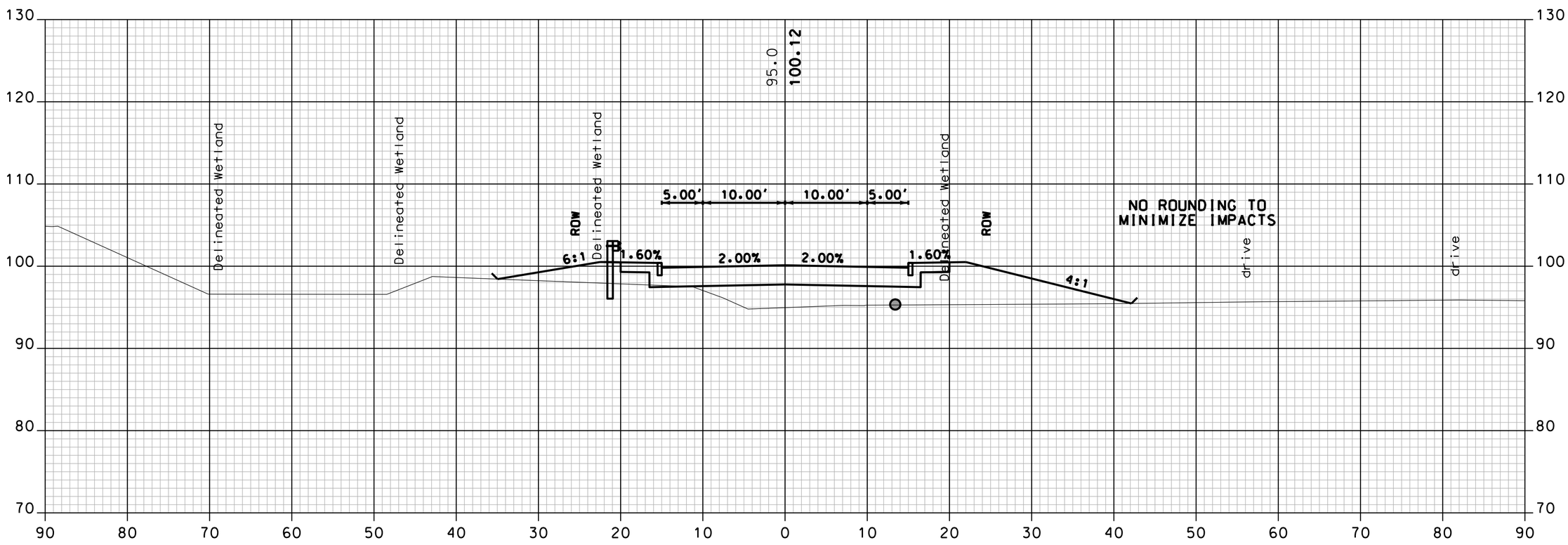
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

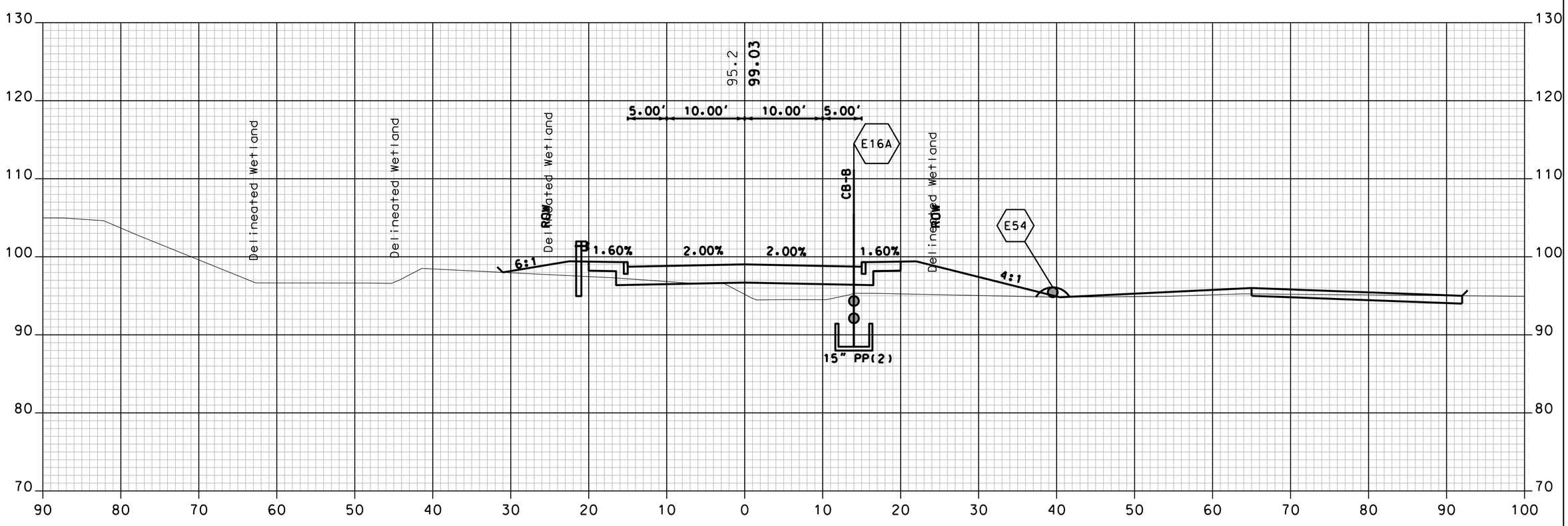
NUMBER	DATE	STATION	STATION	DESCRIPTION



122+00



121+50



121+00

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 5.5 C.Y. ROCK EXCAV. – C.Y.

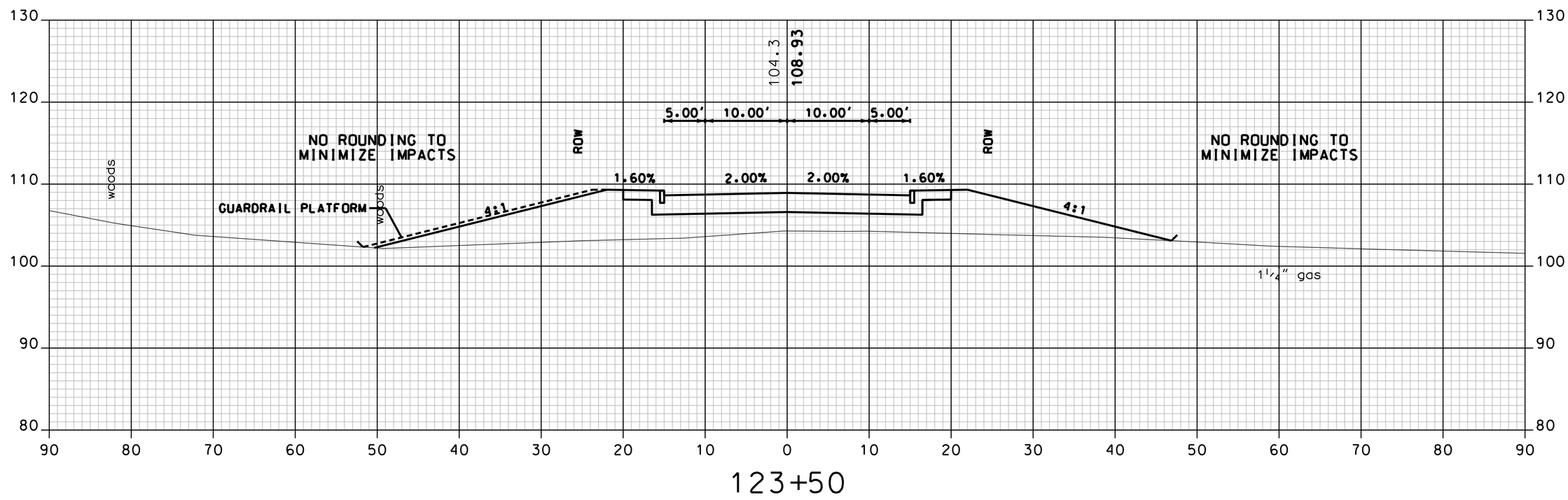
FILL 1320.1 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	162	179

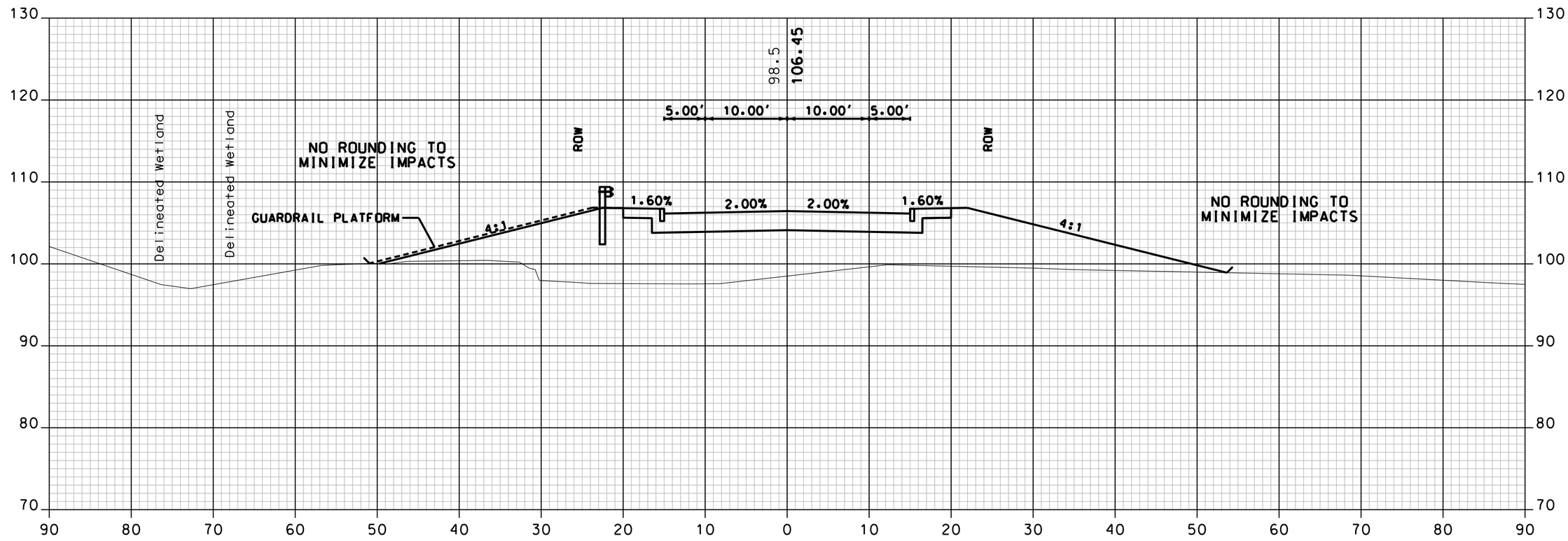
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

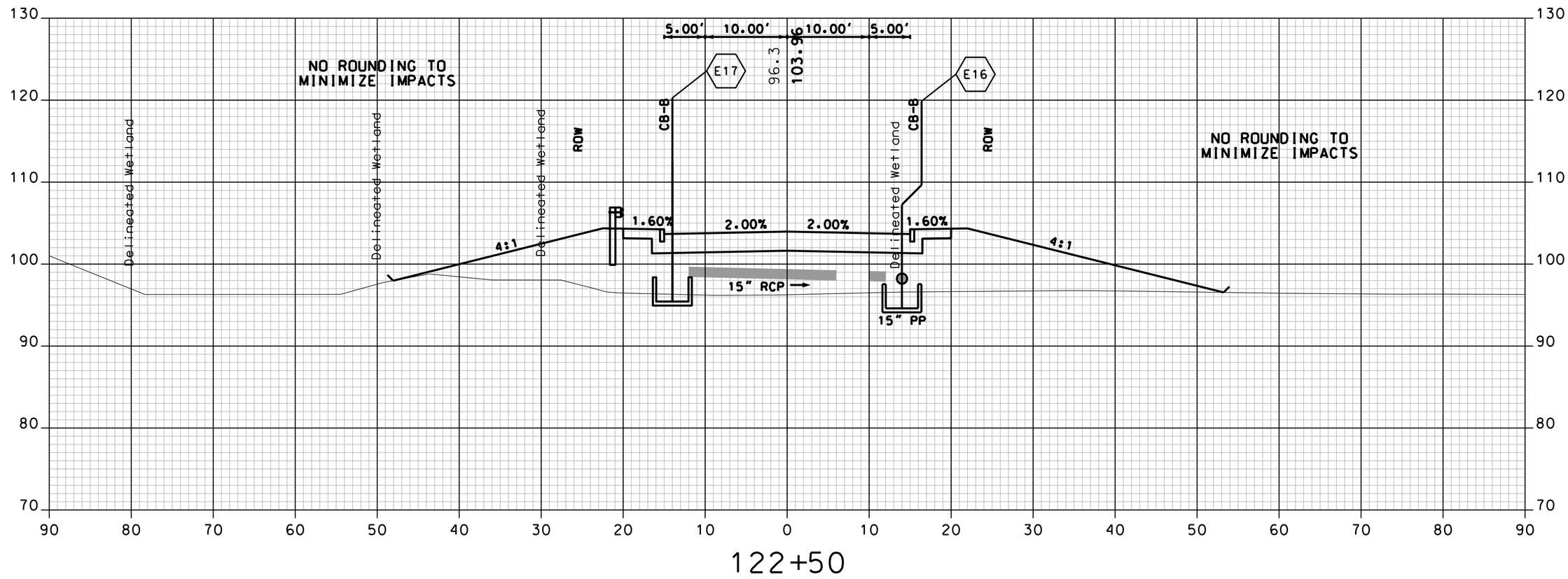
NUMBER	DATE	STATION	STATION	DESCRIPTION



123+50



123+00



122+50

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 0.0 C.Y. ROCK EXCAV. – C.Y.

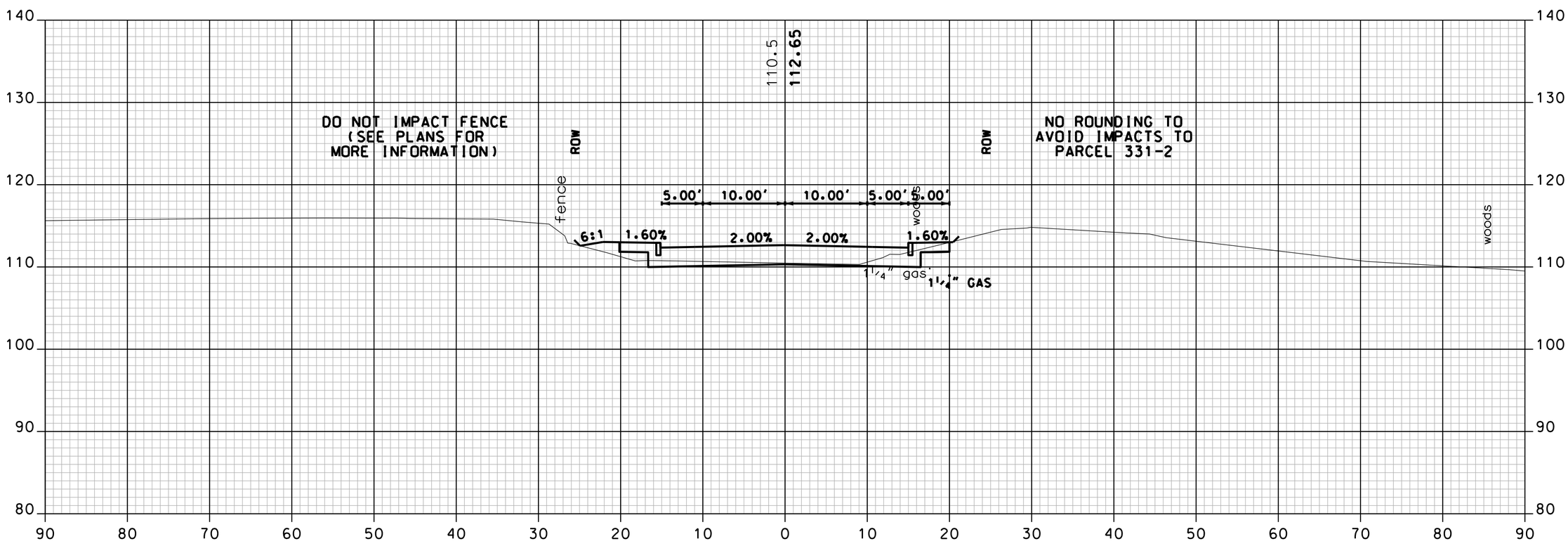
FILL 1924.1 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	163	179

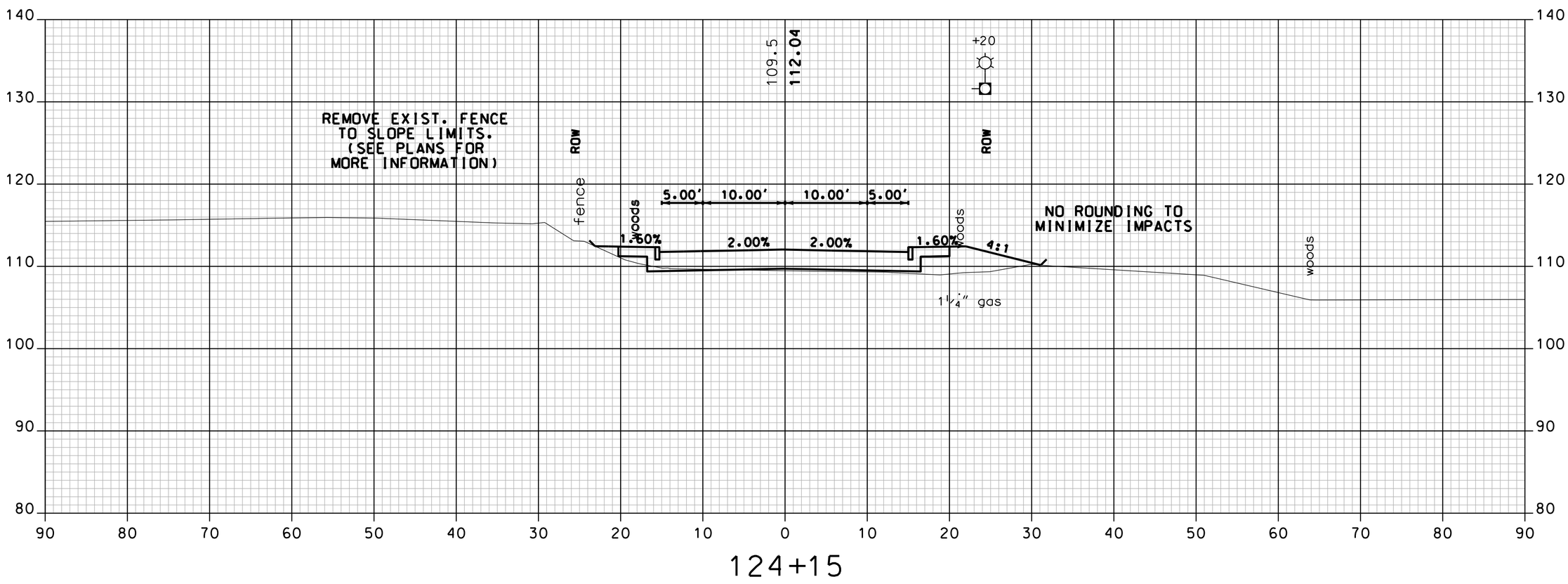
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

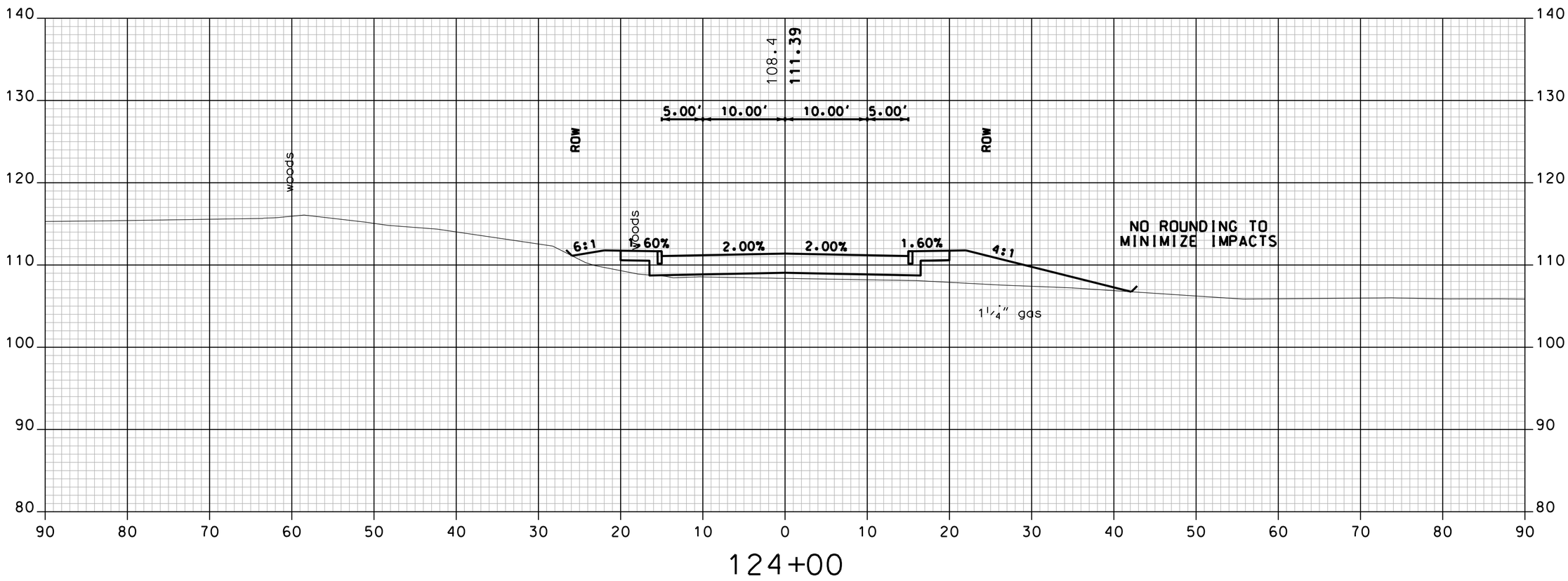
NUMBER	DATE	STATION	STATION	DESCRIPTION



124+29



124+15



124+00

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 34.3 C.Y. ROCK EXCAV. – C.Y.

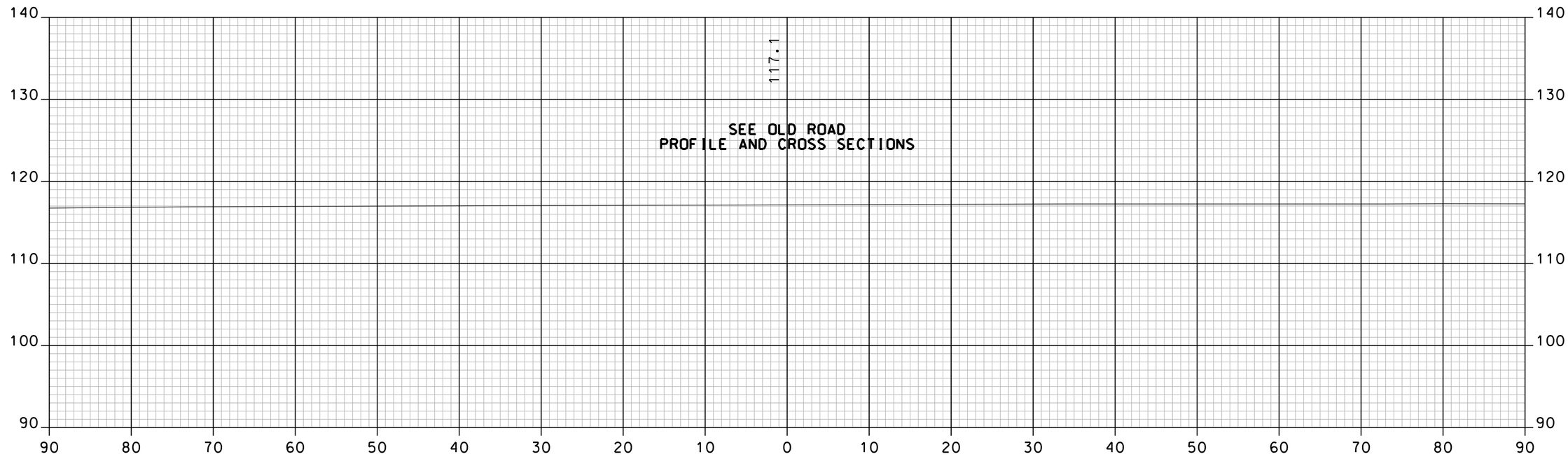
FILL 55.5 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	164	179

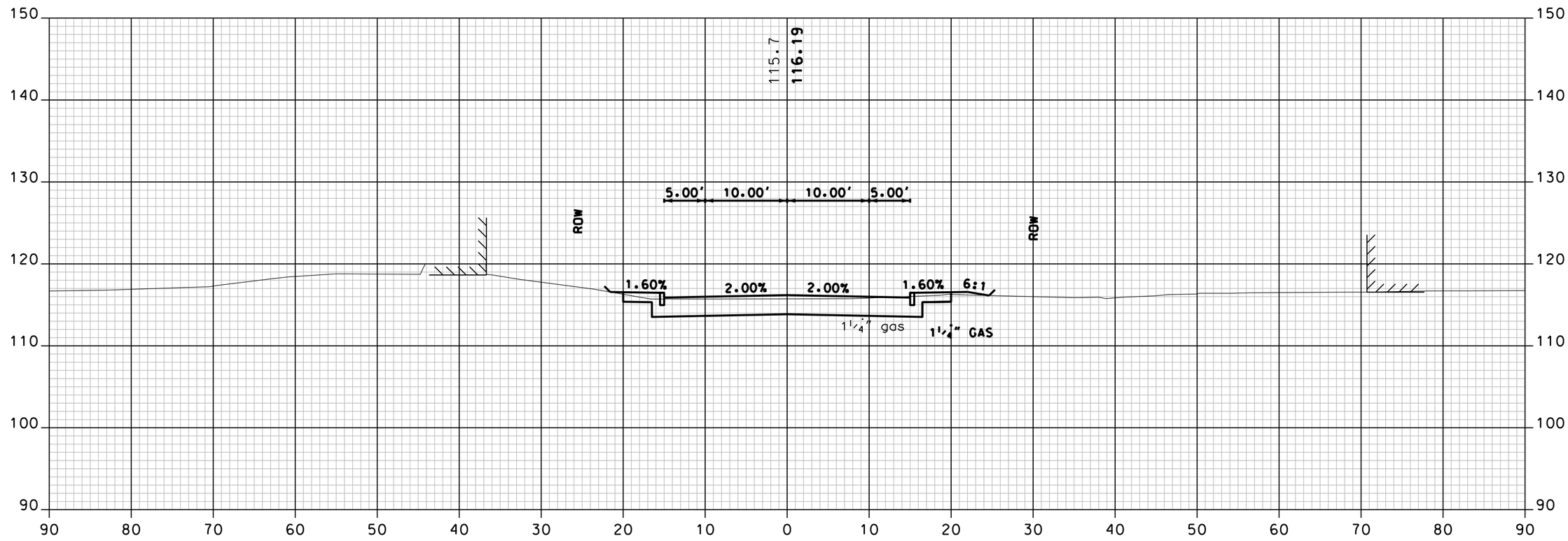
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

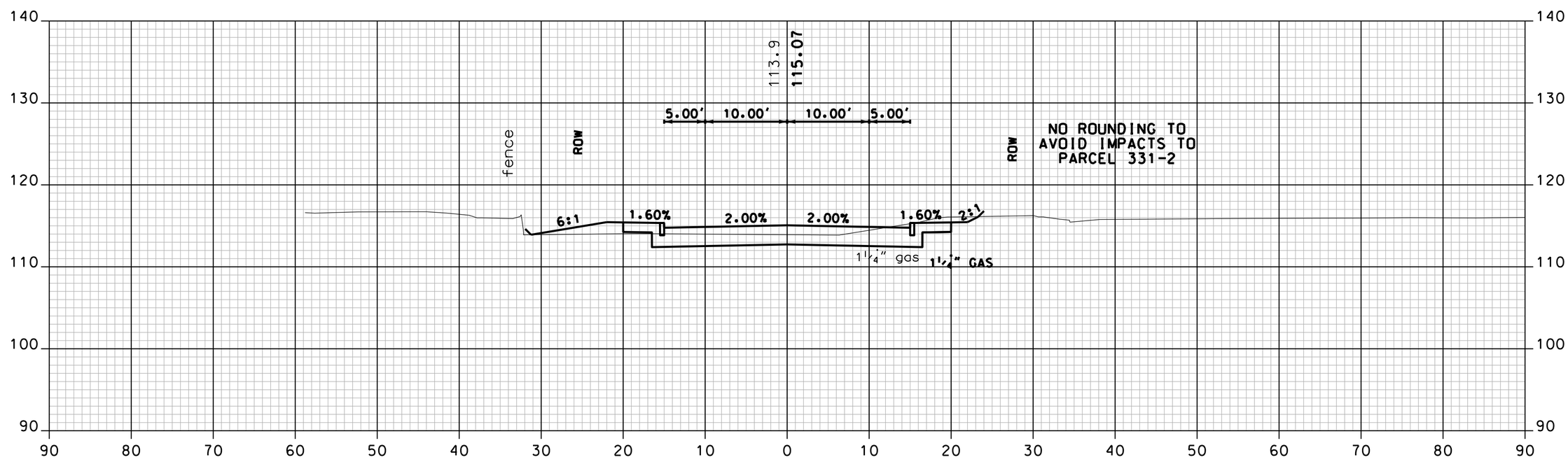
NUMBER	DATE	STATION	STATION	DESCRIPTION



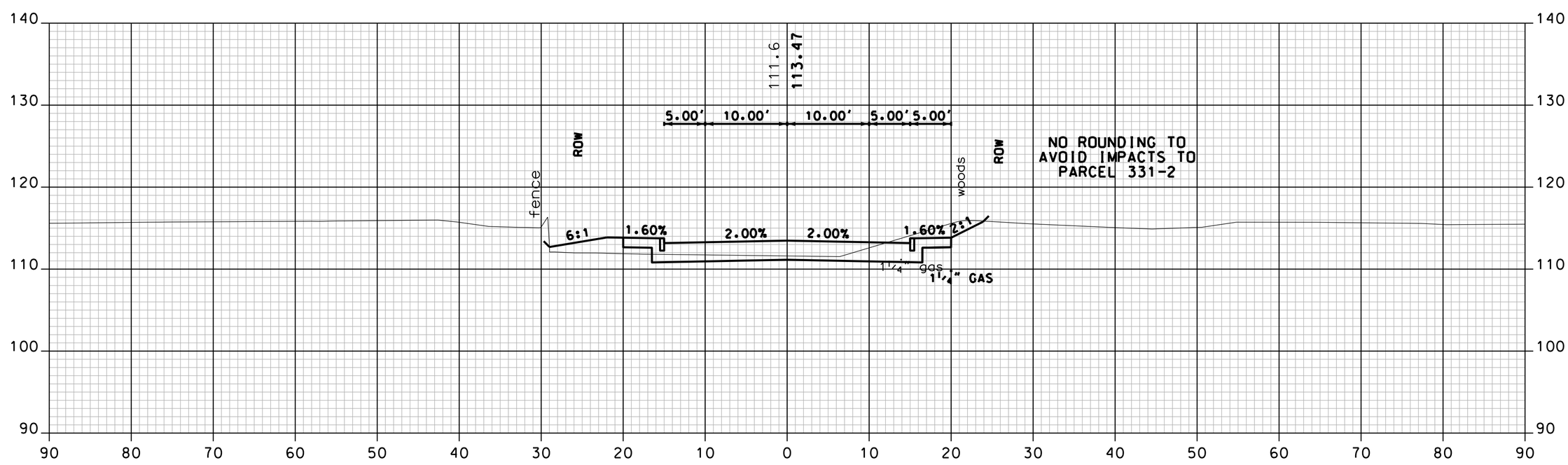
126+00



125+50



125+00



124+50

SERVICE ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

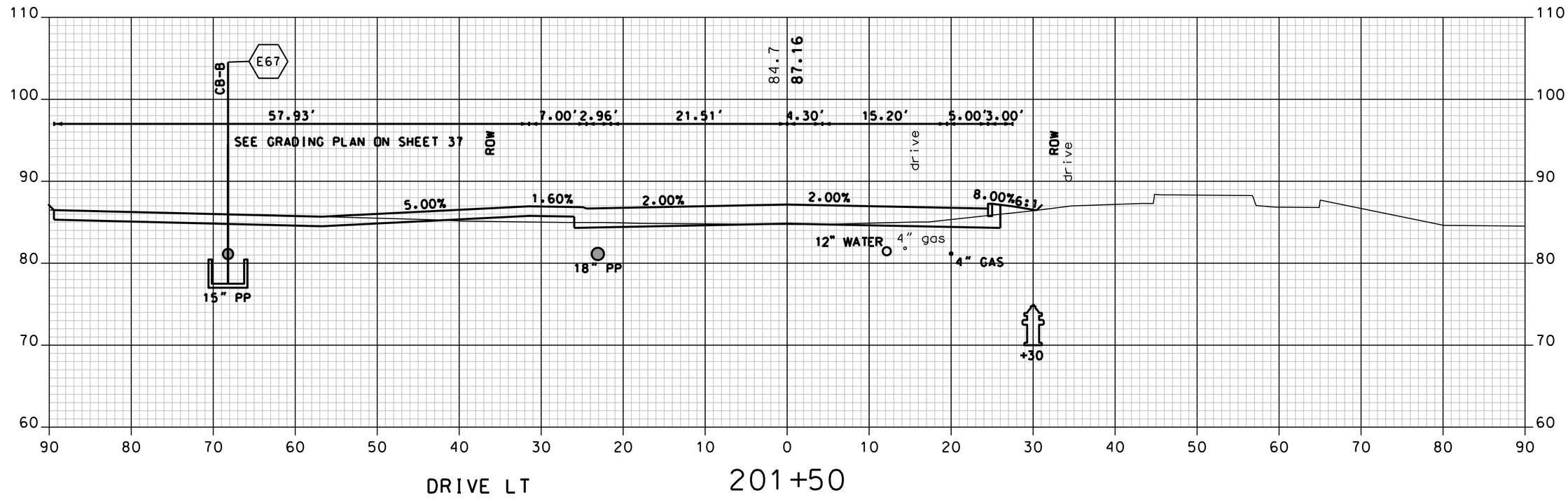
COMMON EXCAV.	328.0 C.Y.	ROCK EXCAV.	– C.Y.
FILL	36.2 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Service	10044G	165	179

SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

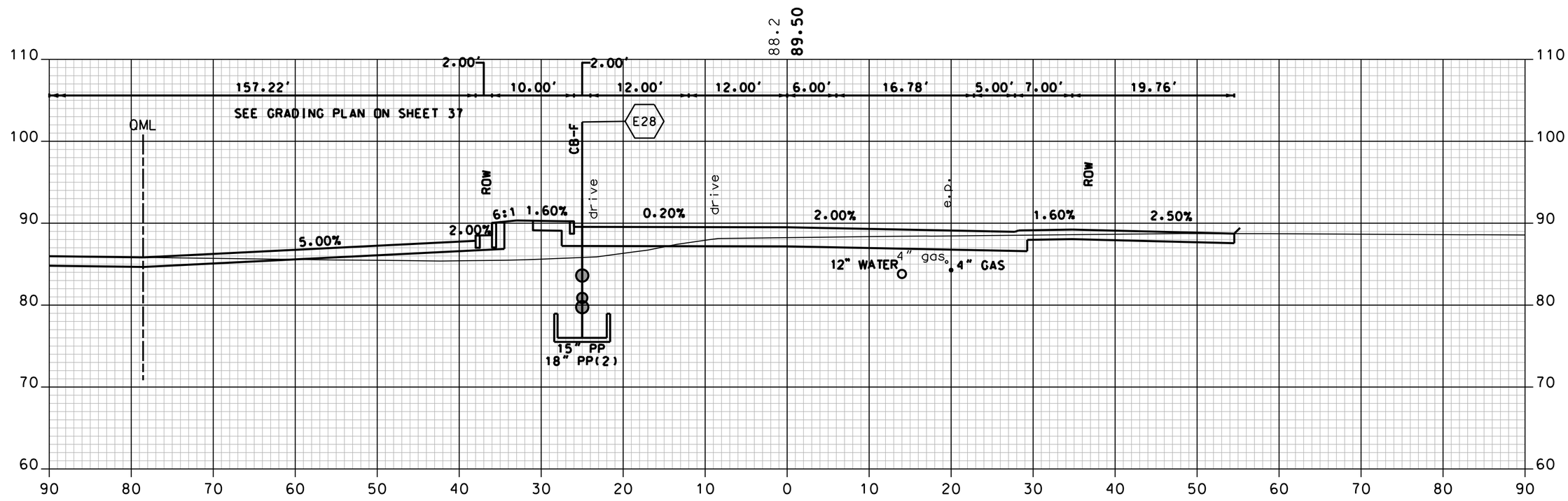
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



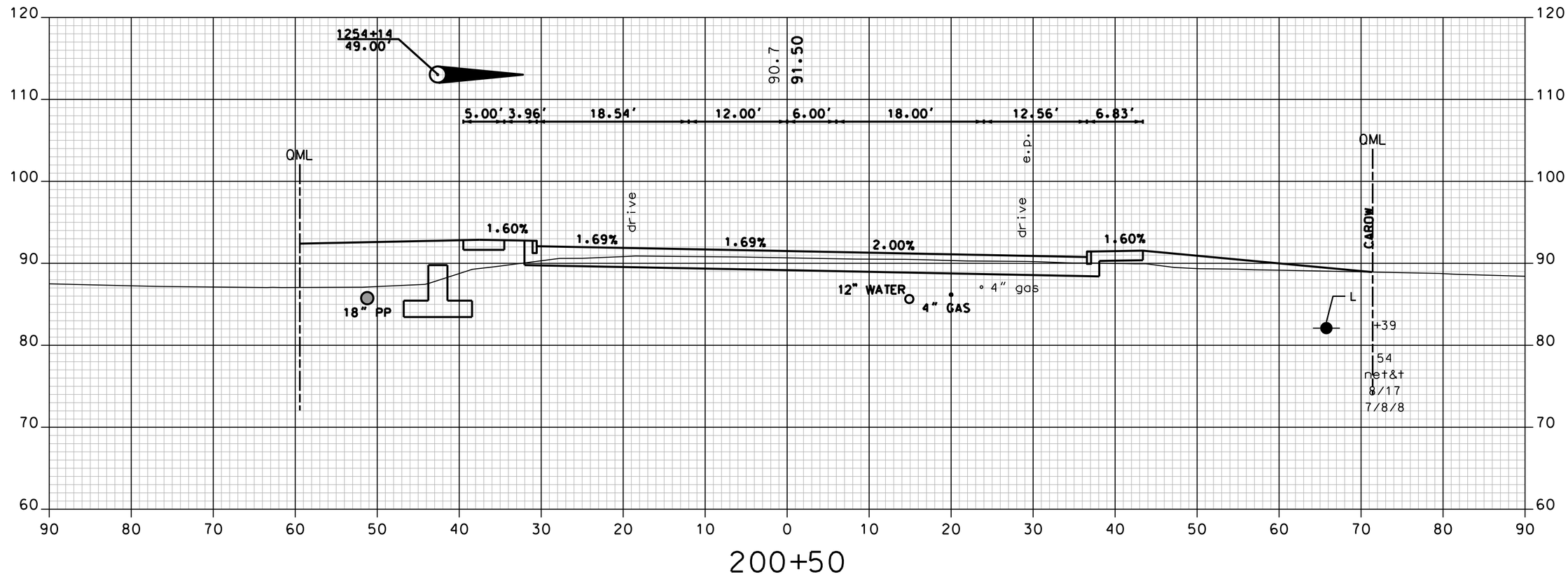
DRIVE LT

201+50



201+00

DRIVE RT



200+50

ACCESS ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 305.3 C.Y. ROCK EXCAV. – C.Y.

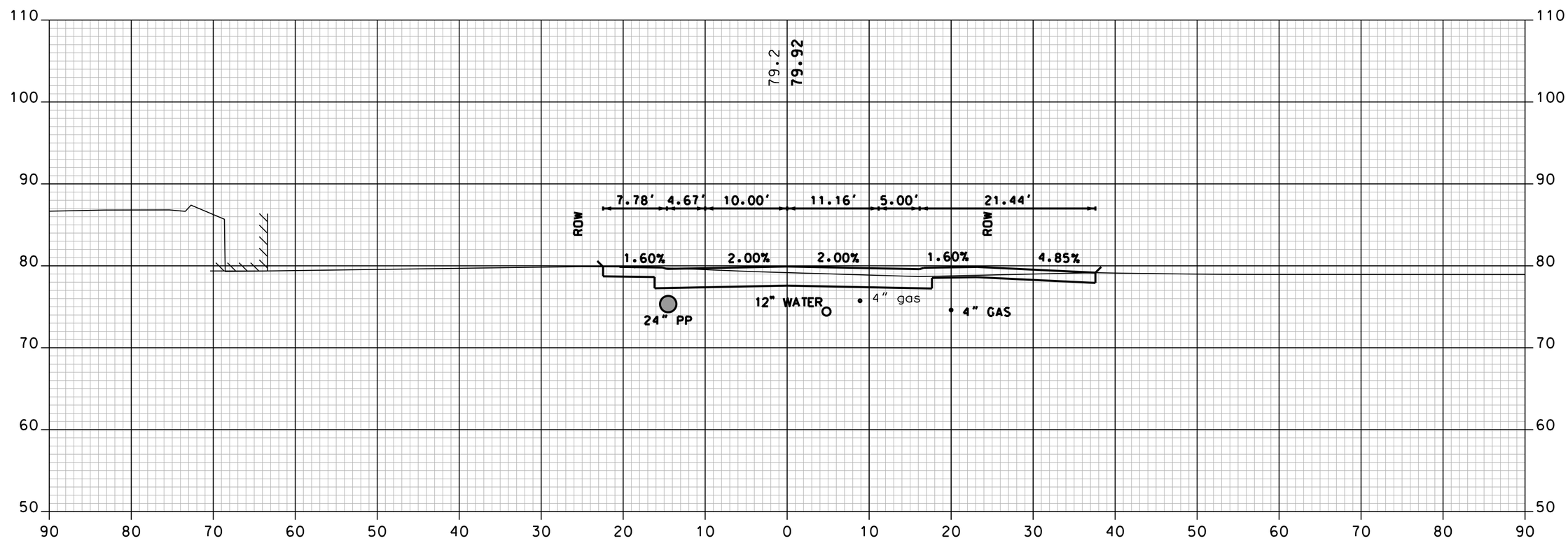
FILL 306.1 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Access	10044G	166	179

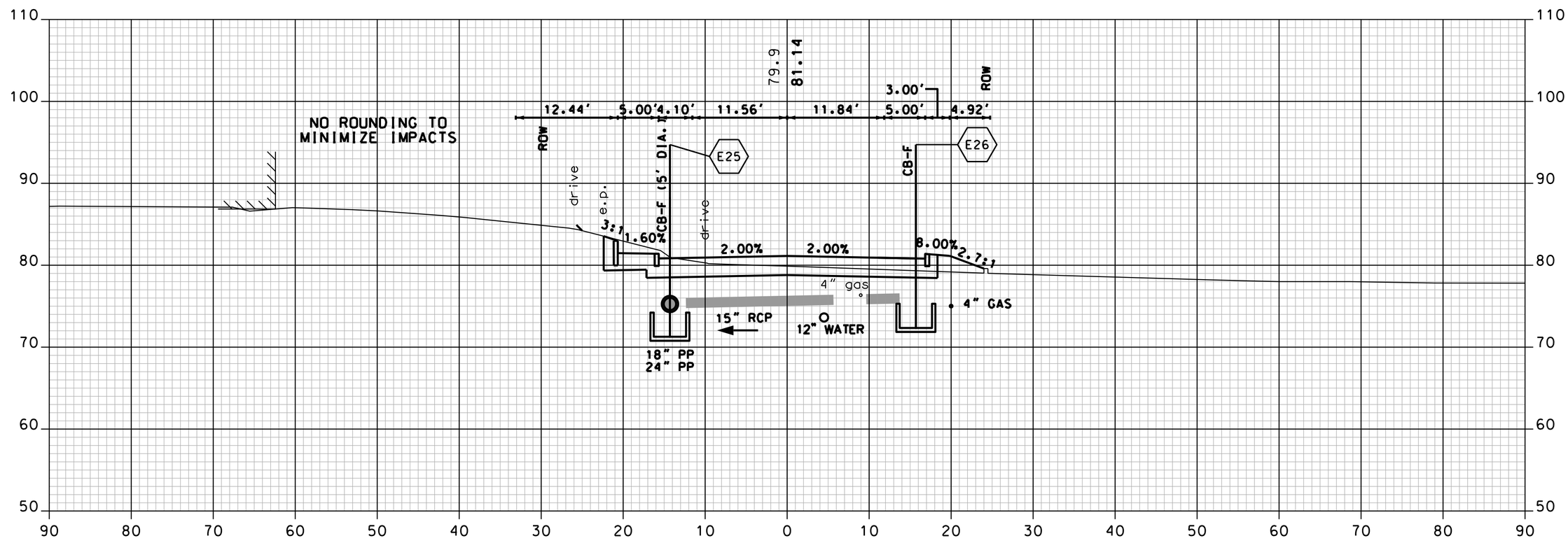
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

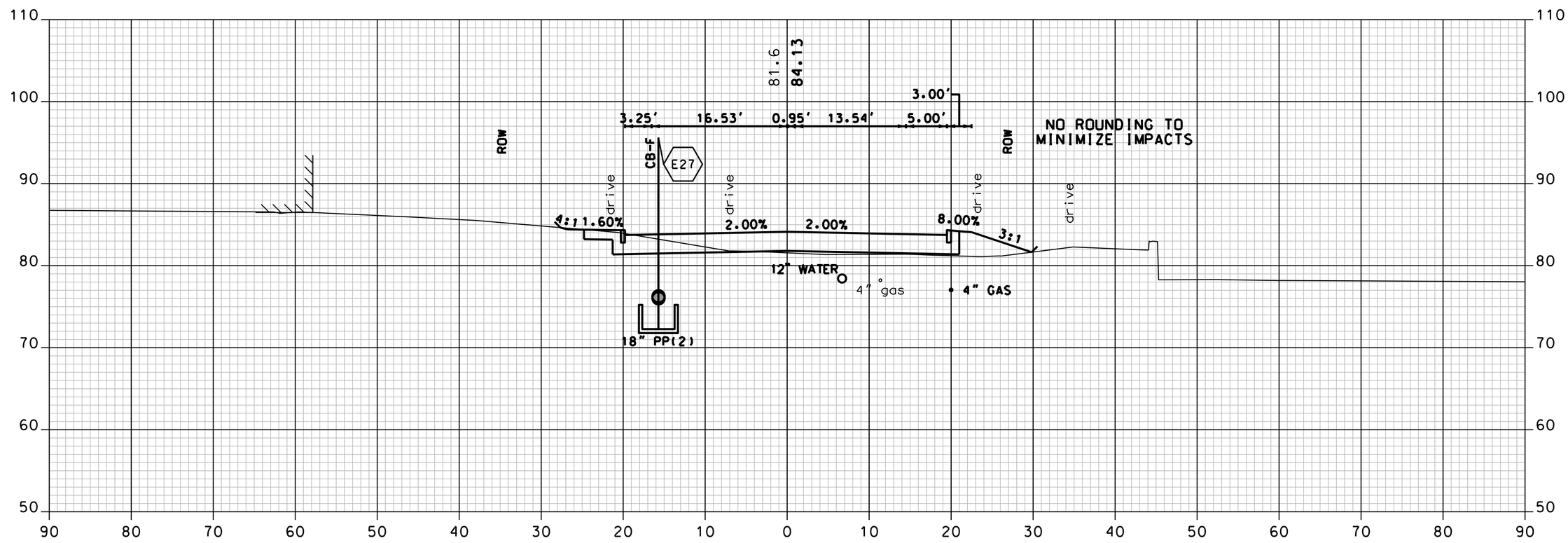
NUMBER	DATE	STATION	STATION	DESCRIPTION



202+75 DRIVE RT



202+50



202+00

NOTE: STA. 202+50 TO 205+00, RT
THE EXISTING DETAIL IS A BEST REPRESENTATION OF THE FUTURE FIELD CONDITIONS BASED ON THE PROPOSED SEPTIC DESIGN (BY OTHERS) FOR PARCEL 341.

ACCESS ROAD

VHB Vanasse Hangen Brustlin, Inc.

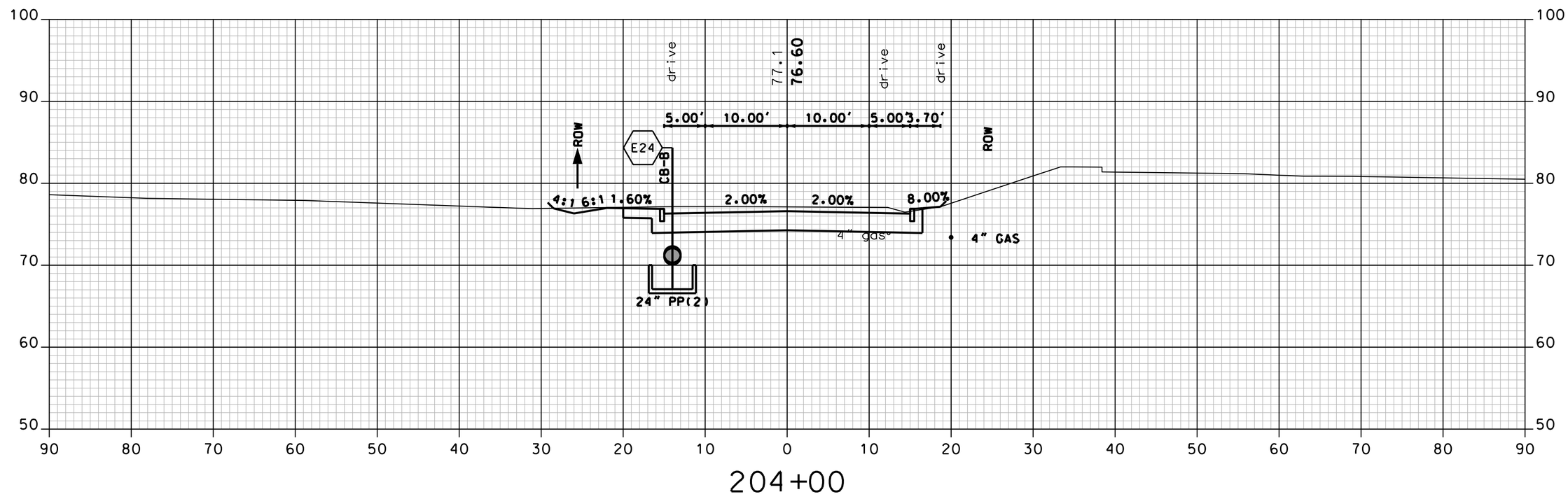
SHEET TOTALS
COMMON EXCAV. 217.4 C.Y. ROCK EXCAV. – C.Y.
FILL 31.0 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Access	10044G	167	179

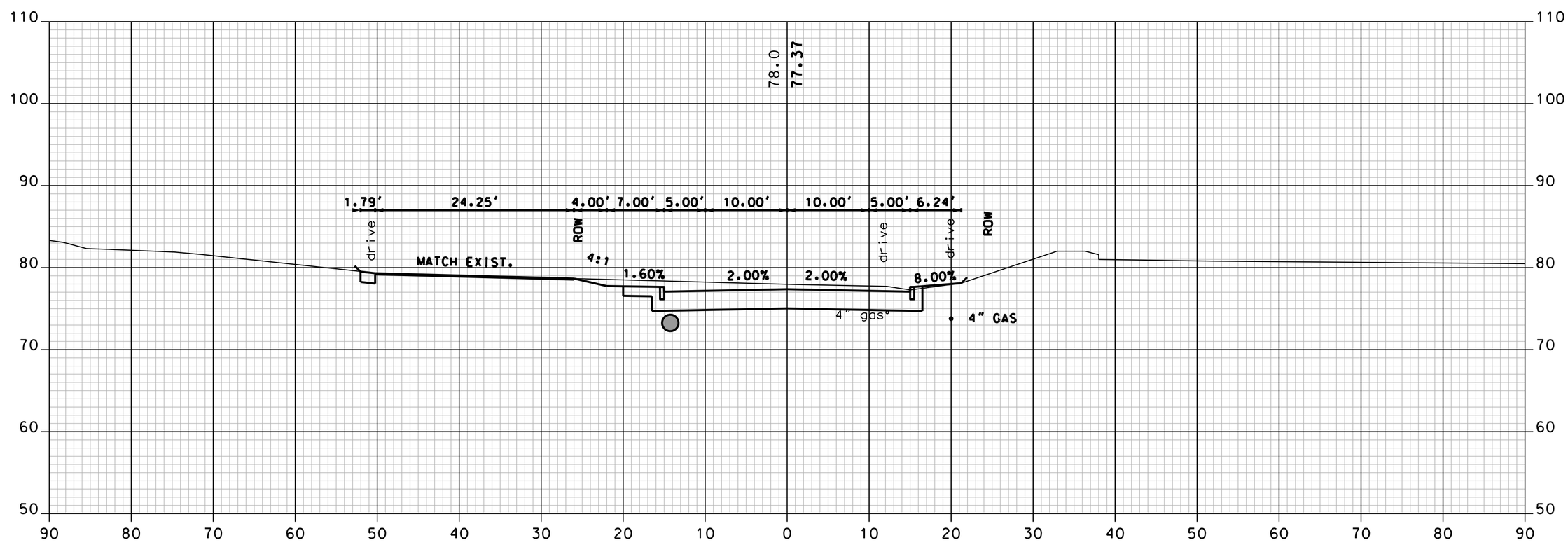
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

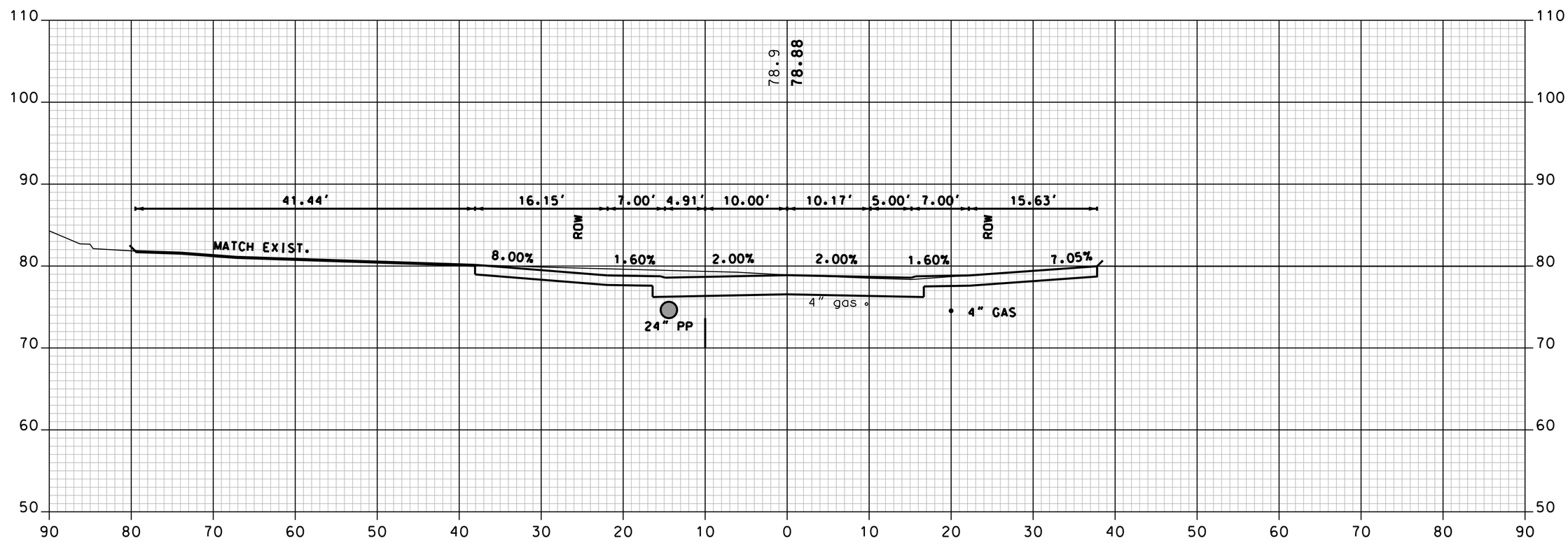
NUMBER	DATE	STATION	STATION	DESCRIPTION



204+00



203+50



DRIVE LT 203+00

NOTE: STA. 202+50 TO 205+00, RT
THE EXISTING DETAIL IS A BEST REPRESENTATION OF THE FUTURE FIELD CONDITIONS BASED ON THE PROPOSED SEPTIC DESIGN (BY OTHERS) FOR PARCEL 341.

ACCESS ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

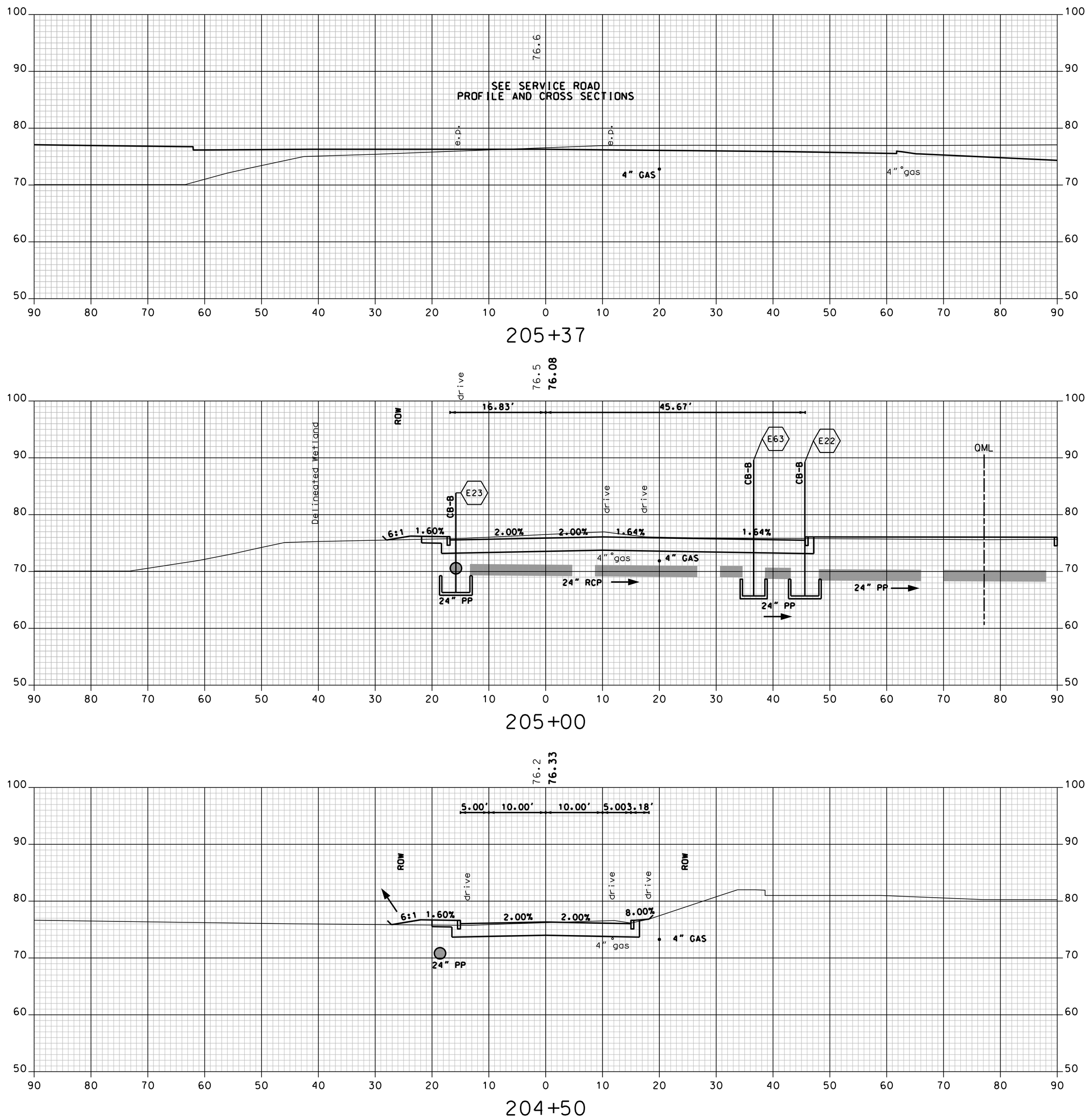
COMMON EXCAV.	553.0 C.Y.	ROCK EXCAV.	- C.Y.
FILL	5.5 C.Y.	MUCK EXCAV.	- C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Access	10044G	168	179

SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



NOTE: STA. 202+50 TO 205+00, RT
THE EXISTING DETAIL IS A BEST REPRESENTATION
OF THE FUTURE FIELD CONDITIONS BASED ON THE
PROPOSED SEPTIC DESIGN (BY OTHERS) FOR PARCEL 341.

ACCESS ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

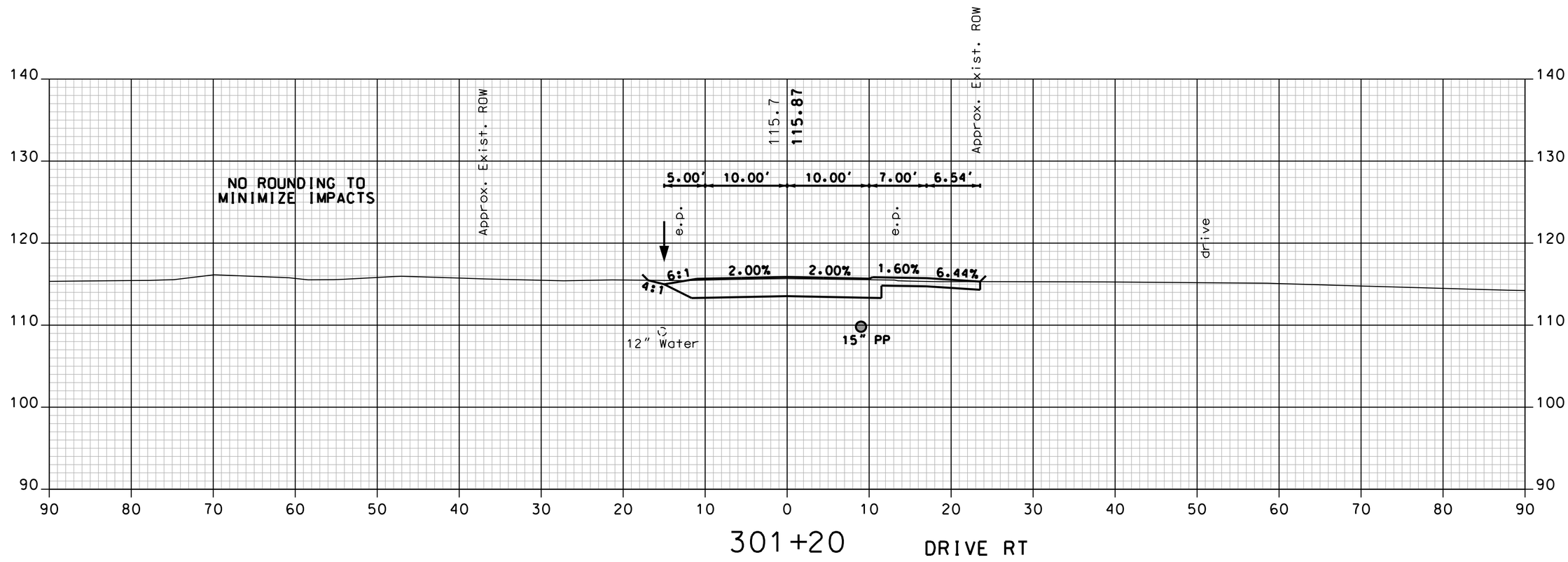
COMMON EXCAV.	384.2 C.Y.	ROCK EXCAV.	- C.Y.
FILL	27.5 C.Y.	MUCK EXCAV.	- C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Access	10044G	169	179

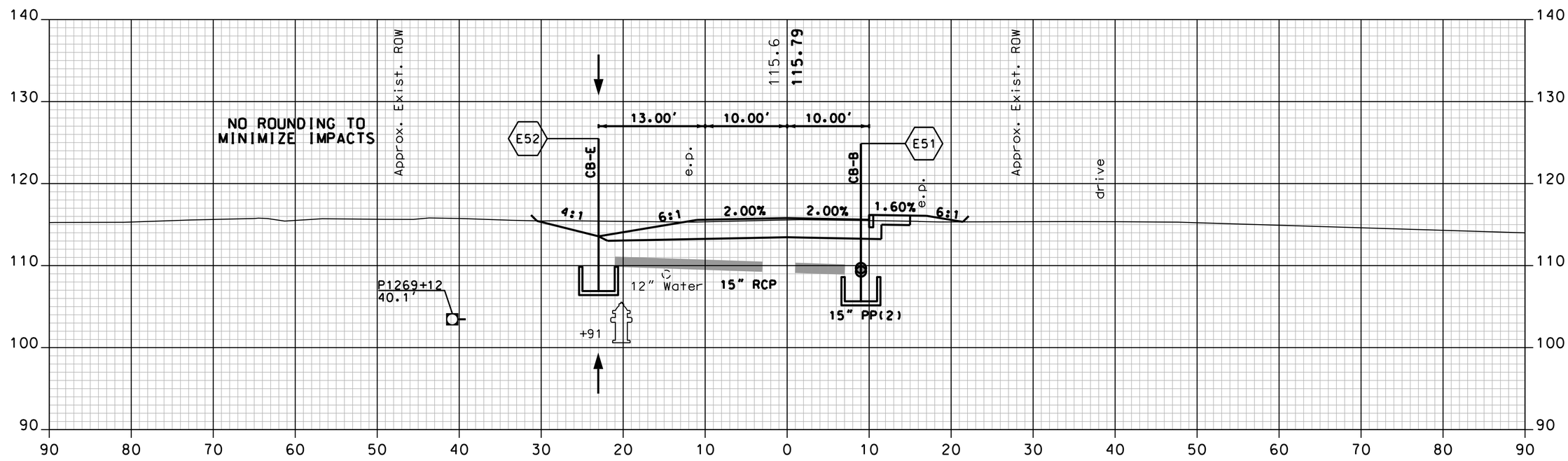
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

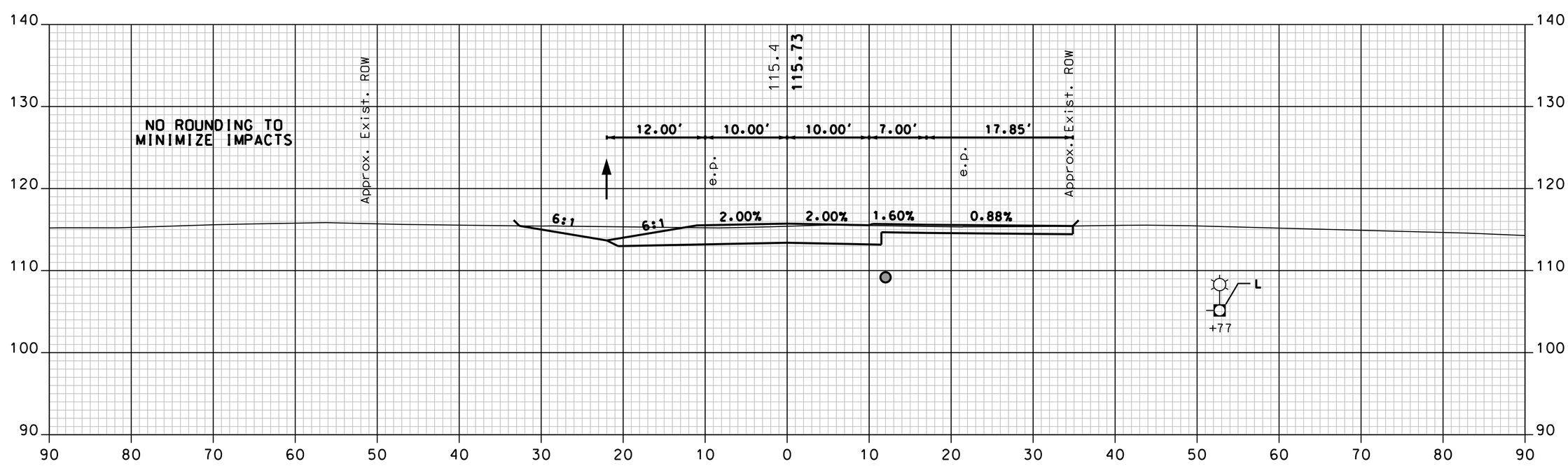
NUMBER	DATE	STATION	STATION	DESCRIPTION



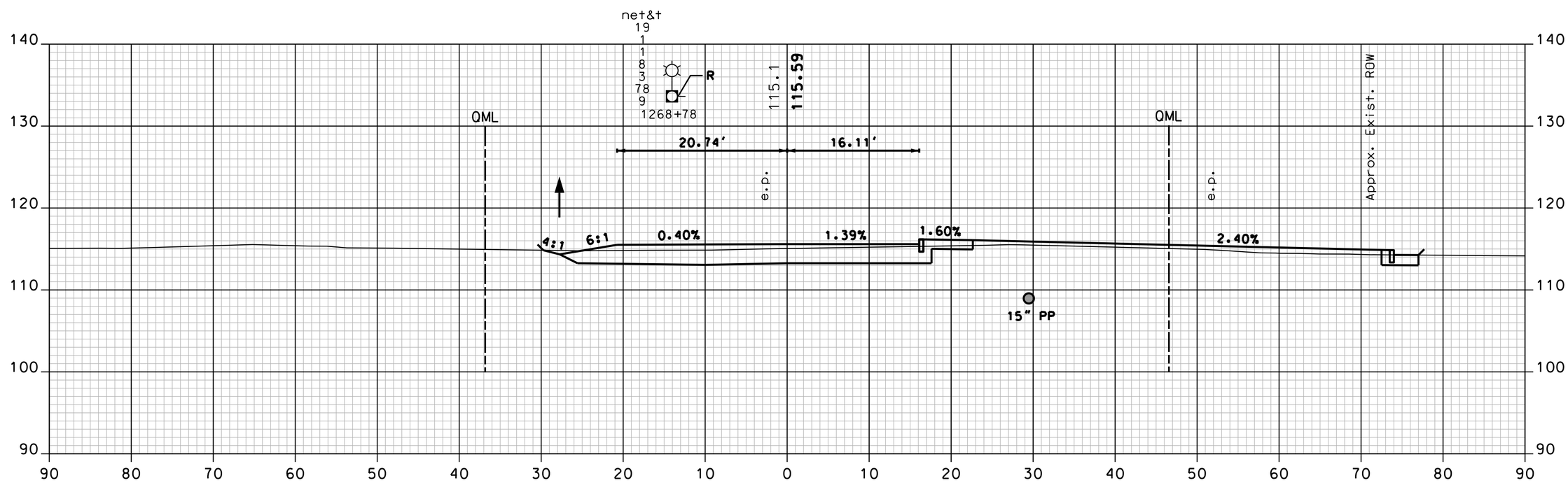
301+20 DRIVE RT



301+00



300+85 DRIVE RT



300+50

NOTE: STA. 300+50 TO 301+50, 1.6% SLOPE FOR SIDEWALK SLOPES AWAY FROM ROADWAY. (SEE CROSS SECTIONS)

OLD ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

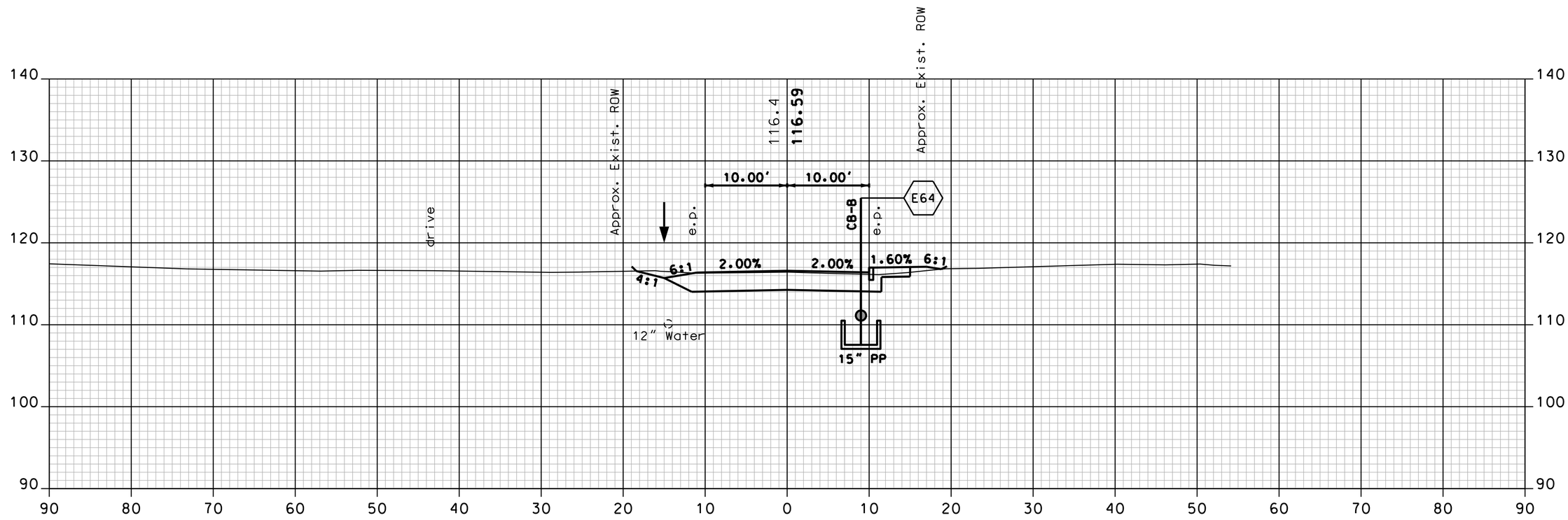
COMMON EXCAV.	304.5 C.Y.	ROCK EXCAV.	– C.Y.
FILL	18.8 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Old	10044G	170	179

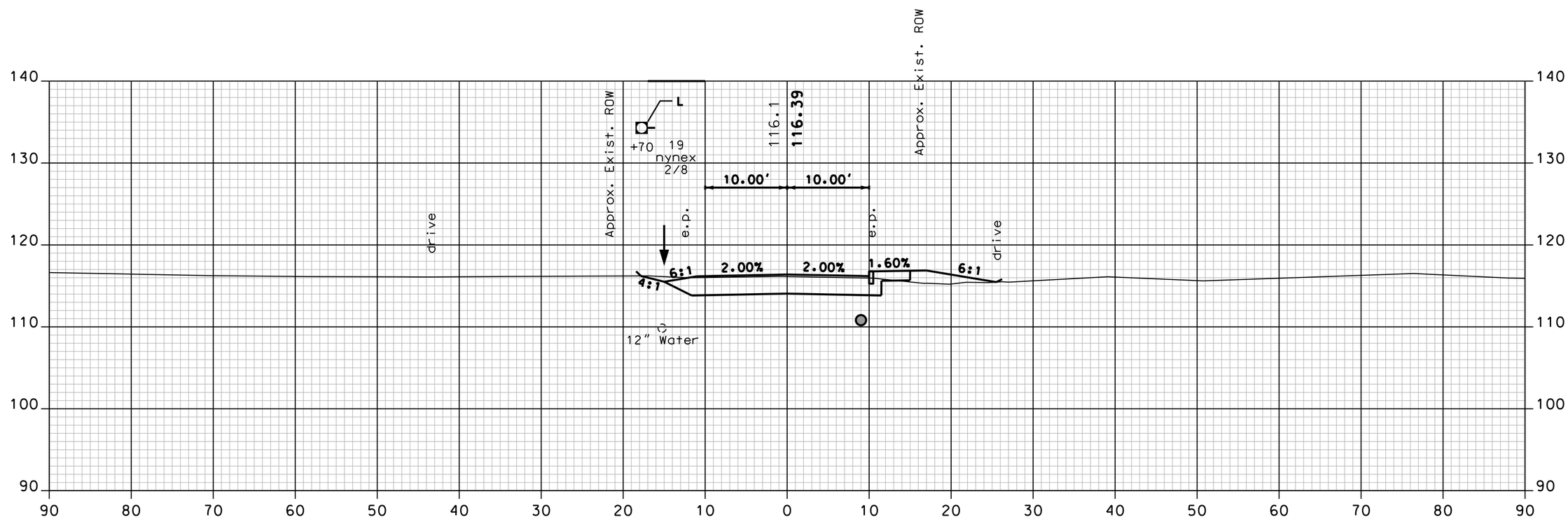
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

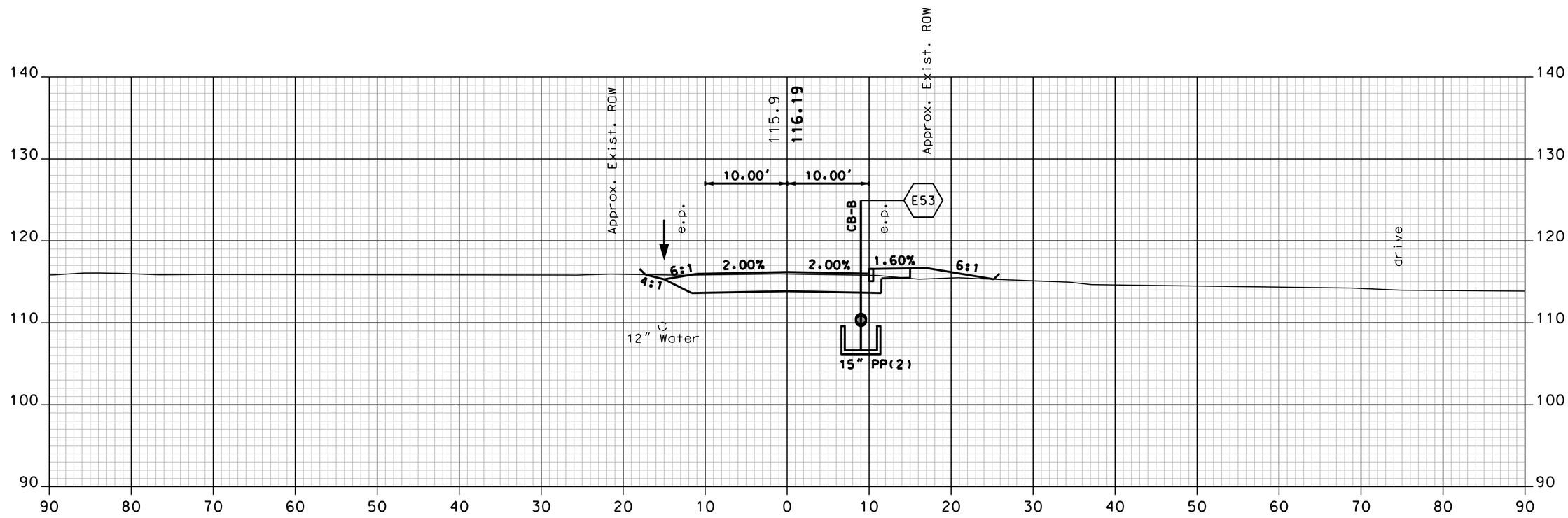
NUMBER	DATE	STATION	STATION	DESCRIPTION



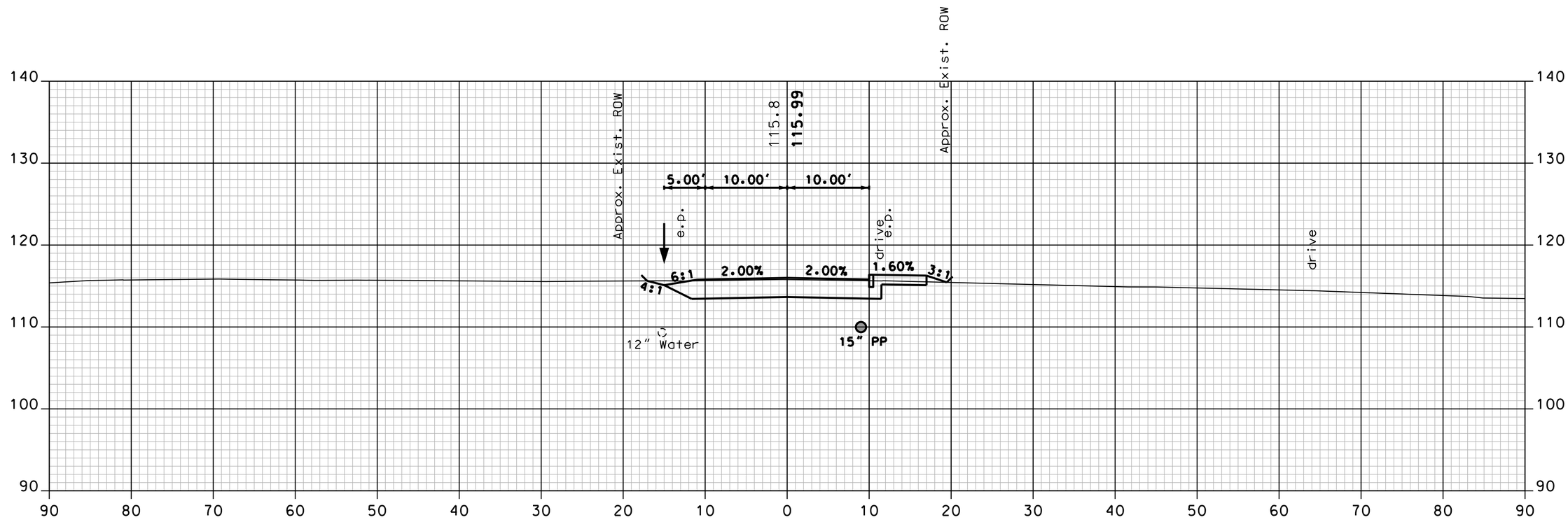
303+00



302+50



302+00



301+50

NOTE: STA. 300+50 TO 301+50, 1.6% SLOPE
FOR SIDEWALK SLOPES AWAY FROM ROADWAY.
(SEE CROSS SECTIONS)

OLD ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

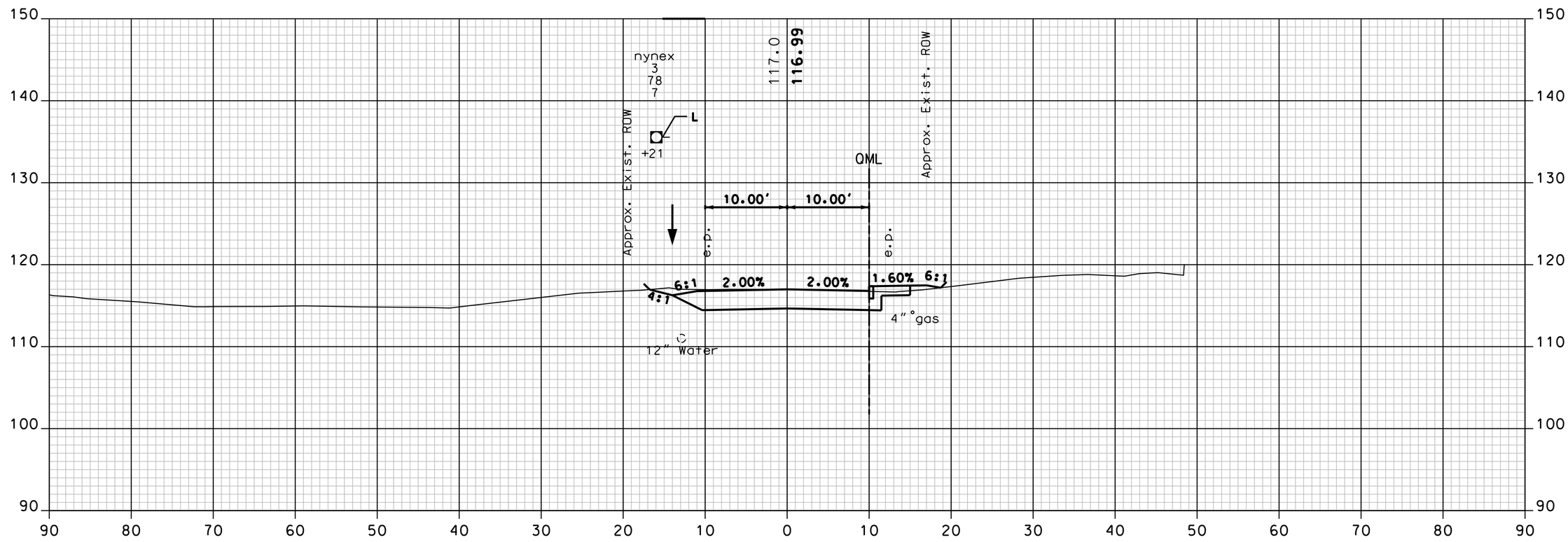
COMMON EXCAV.	364.8 C.Y.	ROCK EXCAV.	– C.Y.
FILL	35.3 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Old	10044G	171	179

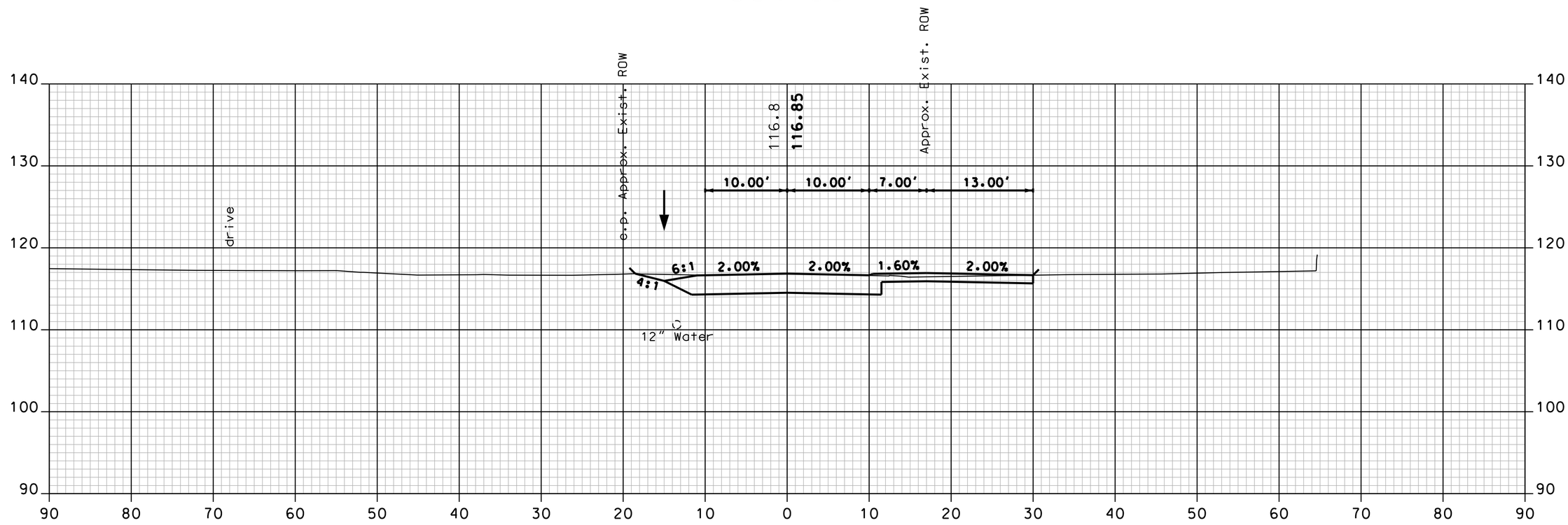
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

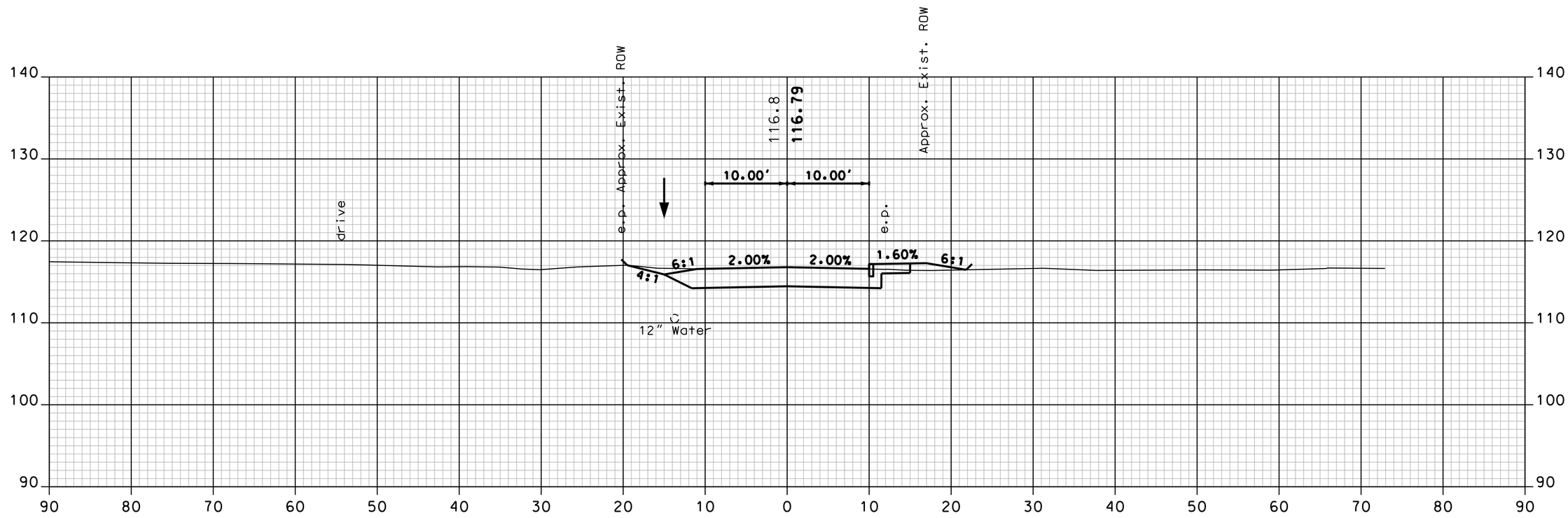
NUMBER	DATE	STATION	STATION	DESCRIPTION



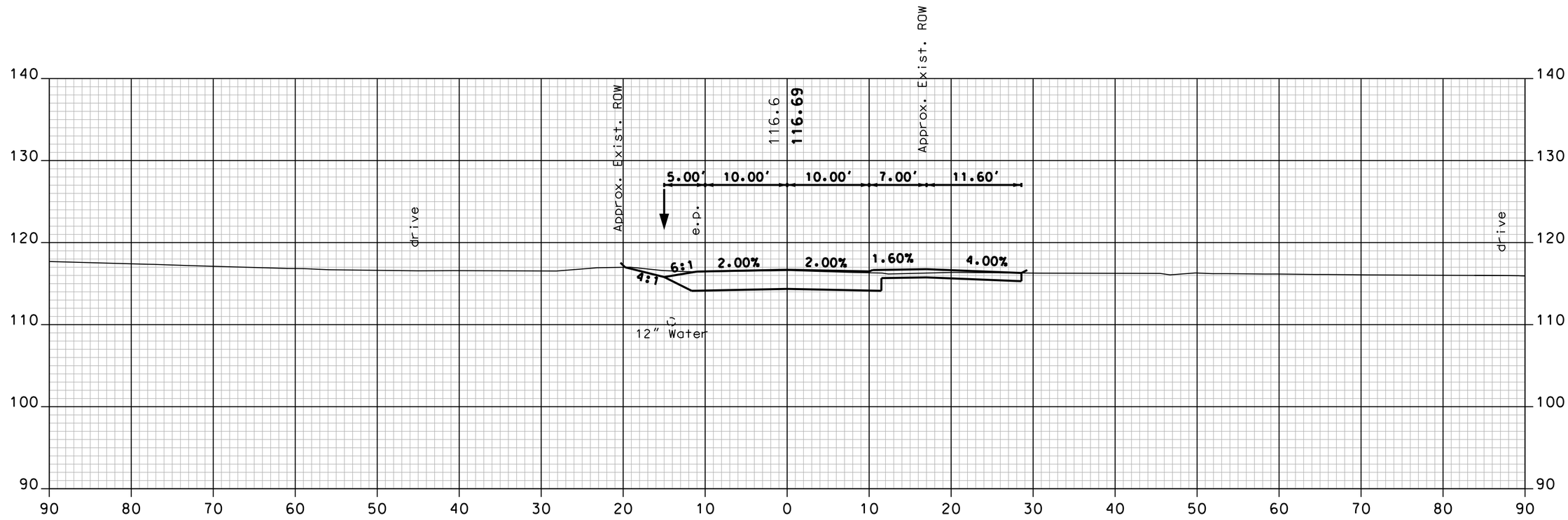
304+00



303+65 DRIVE RT



303+50



303+25 DRIVE RT

OLD ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

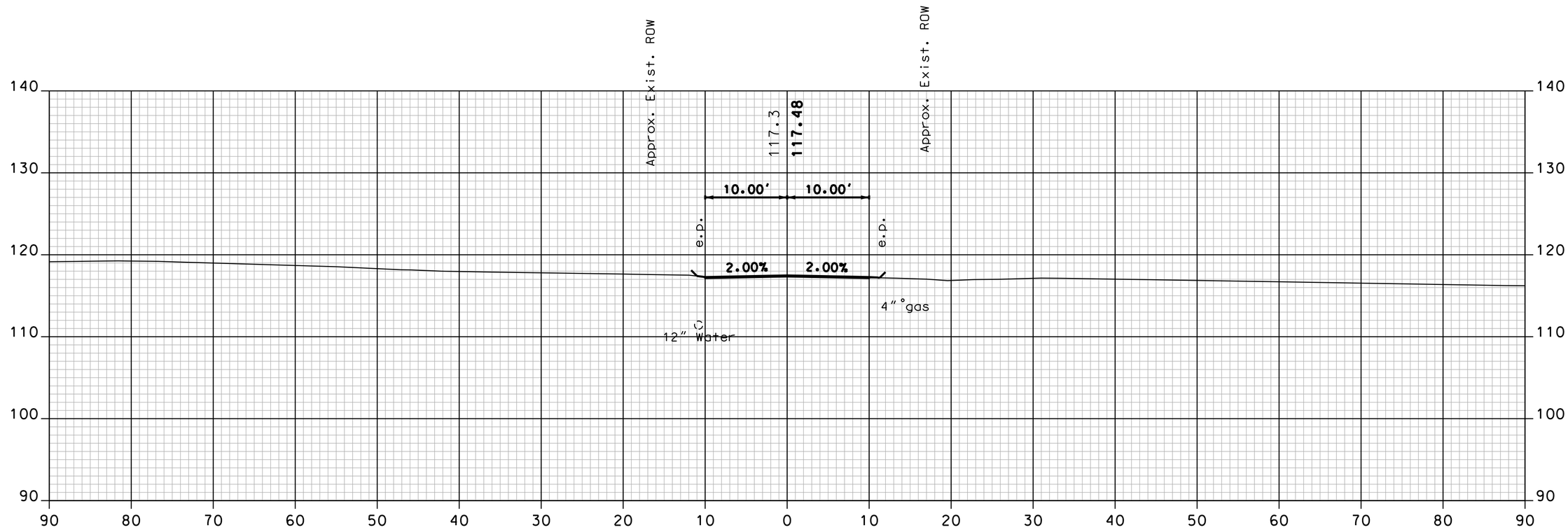
COMMON EXCAV.	272.6 C.Y.	ROCK EXCAV.	– C.Y.
FILL	2.9 C.Y.	MUCK EXCAV.	– C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_01d	10044G	172	179

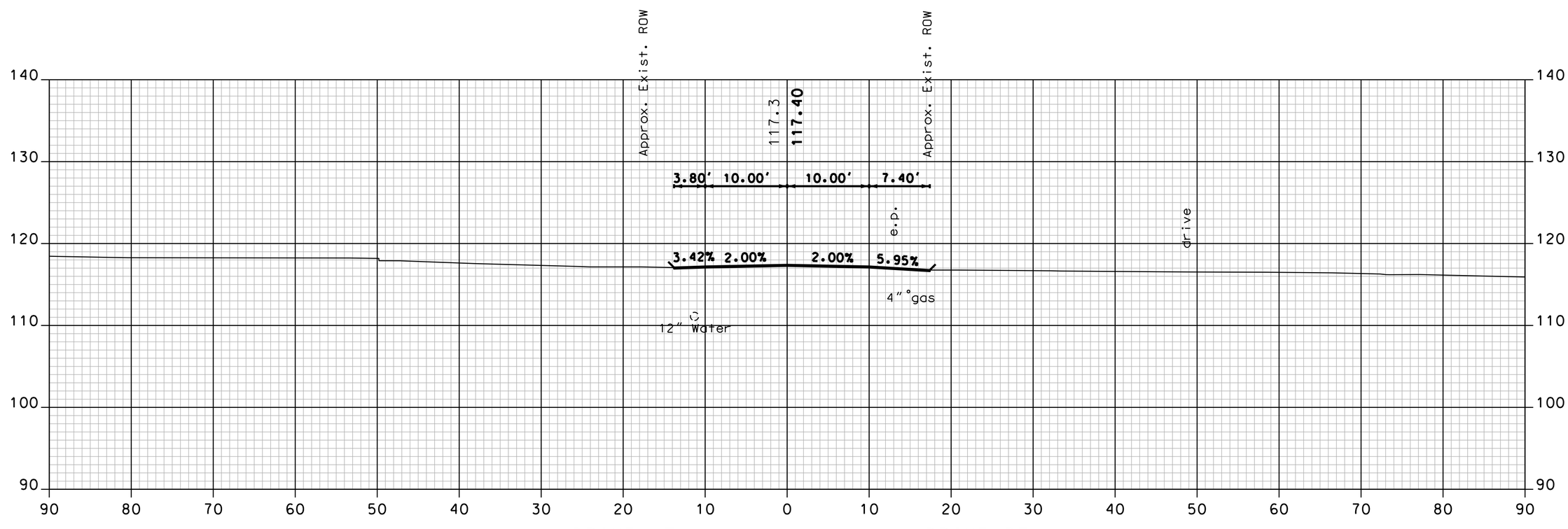
SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

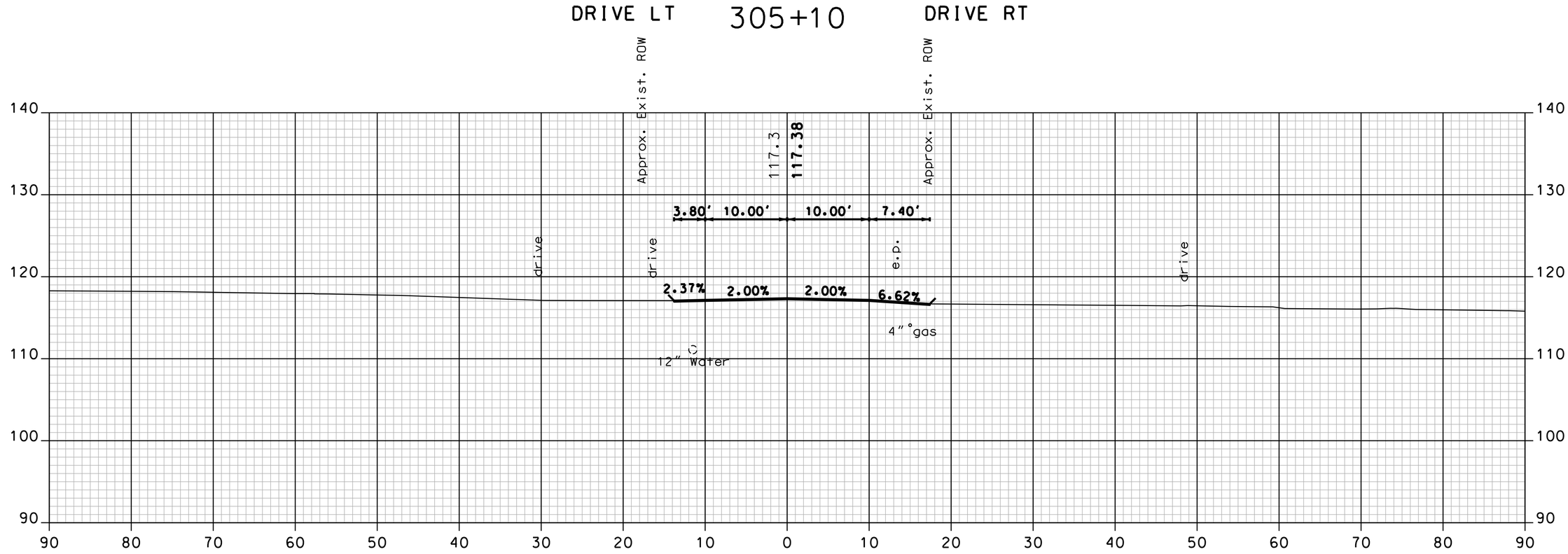
NUMBER	DATE	STATION	STATION	DESCRIPTION



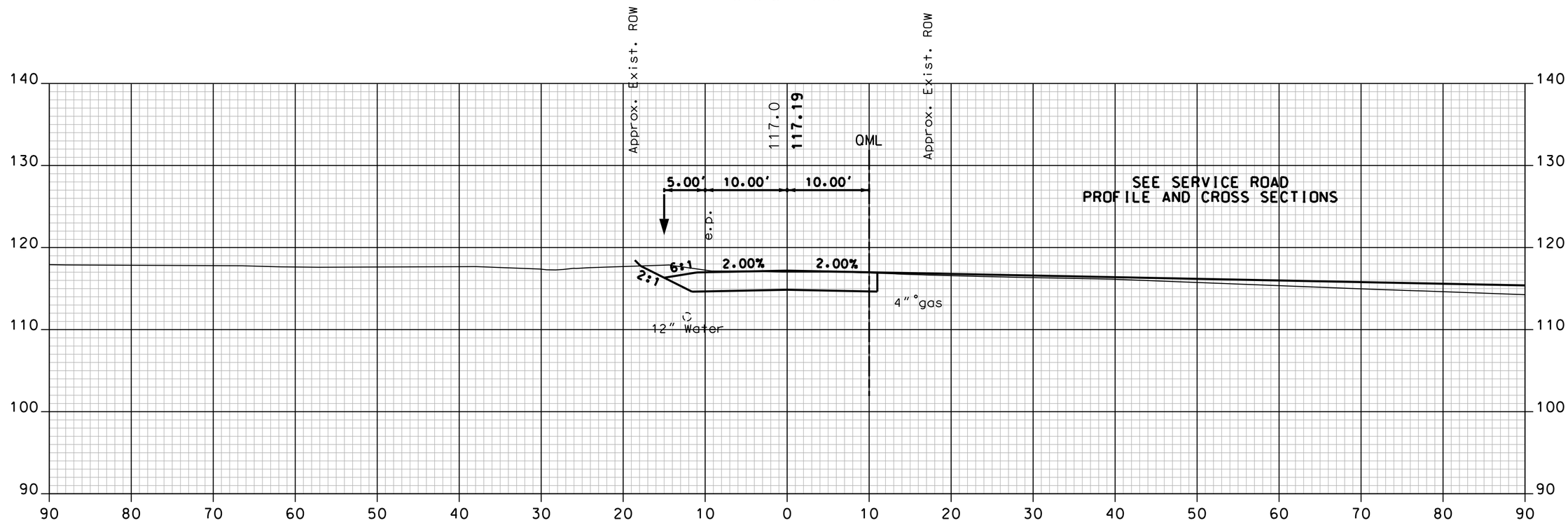
305+50



DRIVE LT 305+10 DRIVE RT



305+00



304+50

OLD ROAD

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 55.6 C.Y. ROCK EXCAV. – C.Y.

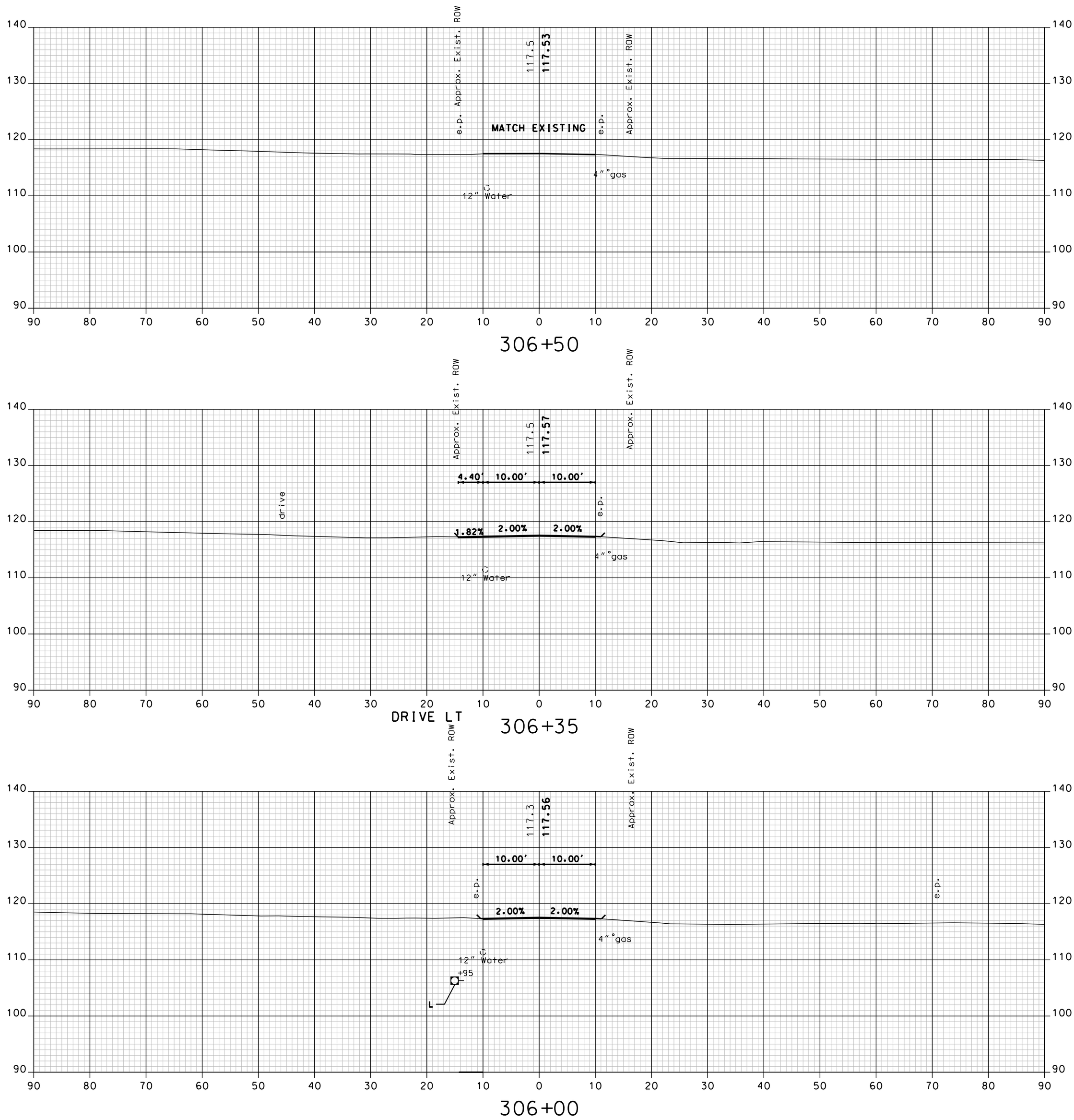
FILL 0.0 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Old	10044G	173	179

SDR PROCCESSED	VHB TEAM	DATE	7/2009
NEW DESIGN	F. KOCZALKA	DATE	9/2014
SHEET CHECKED	A. GRANDE	DATE	8/2015
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



OLD ROAD

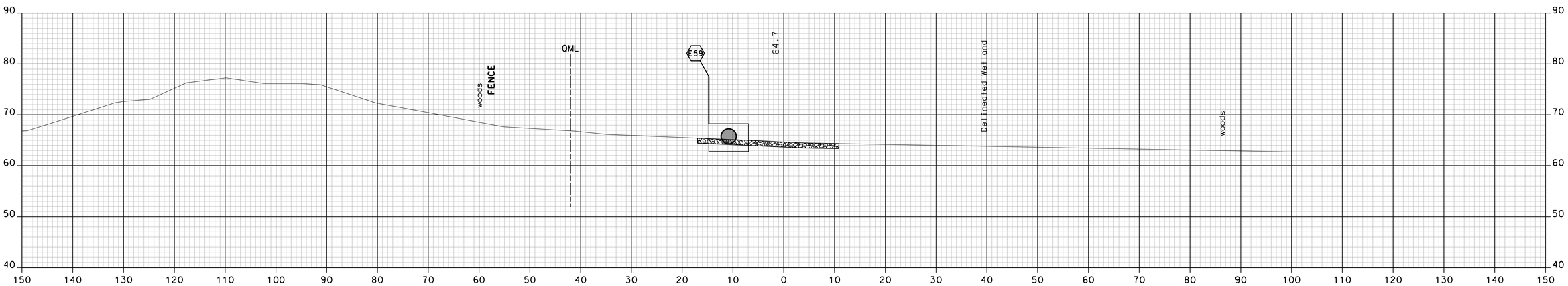
Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

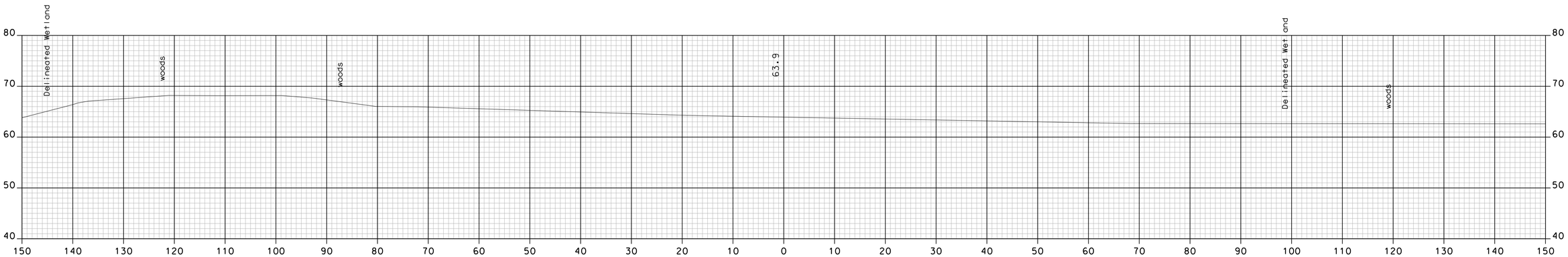
COMMON EXCAV. 0.0 C.Y. ROCK EXCAV. – C.Y.

FILL 0.0 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_Old	10044G	174	179



12+50



12+00

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

BMP #4

Vanasse Hangen Brustlin, Inc.

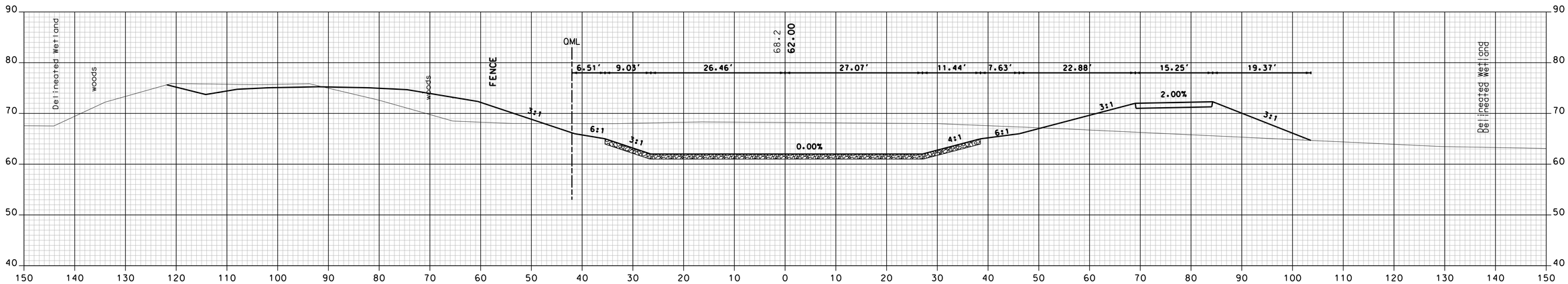
SHEET TOTALS

COMMON EXCAV.	0.0 C.Y.	ROCK EXCAV.	– C.Y.
FILL	308.6 C.Y.	MUCK EXCAV.	– C.Y.

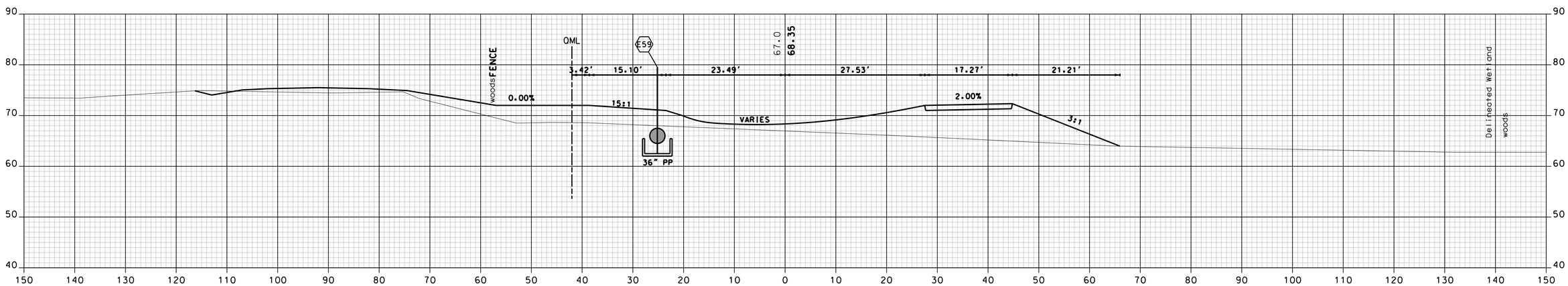
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_BMP	10044G	175	179

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION



13+50



13+00

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

BMP #4

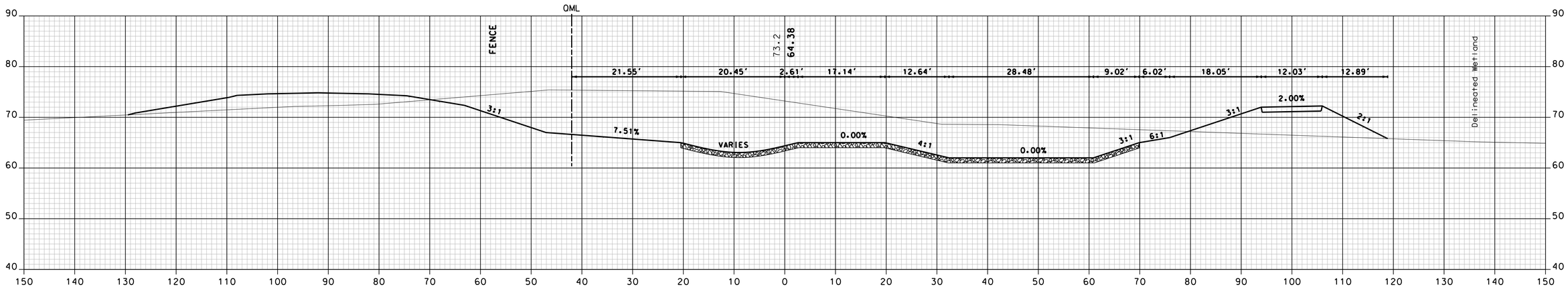
Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

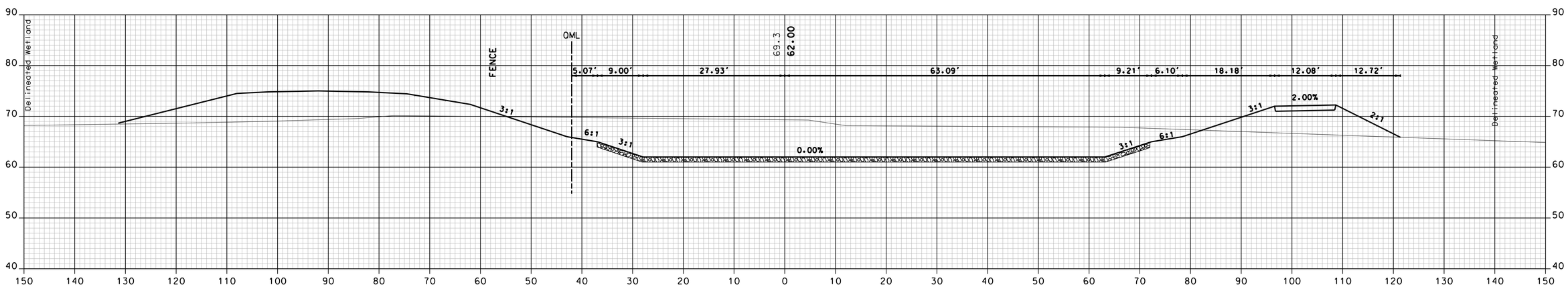
COMMON EXCAV. 1778.1 C.Y. ROCK EXCAV. – C.Y.

FILL 753.1 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_BMP	10044G	176	179



14+50



14+00

BMP #4

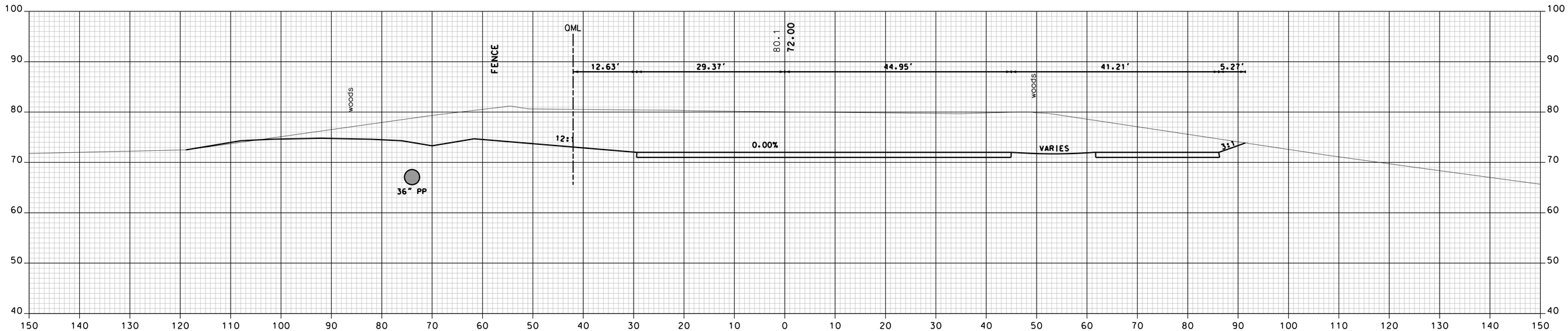
Vanasse Hangen Brustlin, Inc.

SHEET TOTALS			
COMMON EXCAV. 3735.4 C.Y.		ROCK EXCAV. – C.Y.	
FILL 408.1 C.Y.		MUCK EXCAV. – C.Y.	
DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_BMP	10044G	177	179

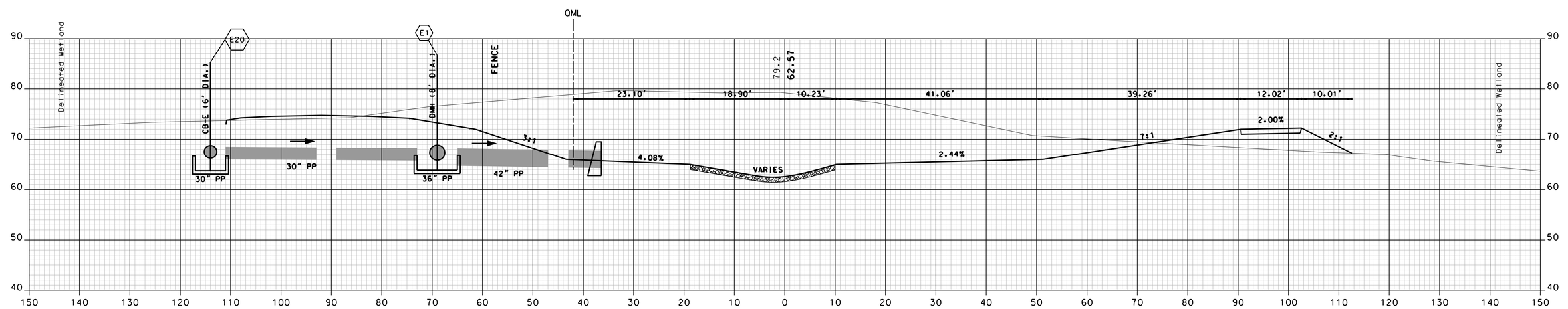
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE



15+50



15+00

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

BMP #4

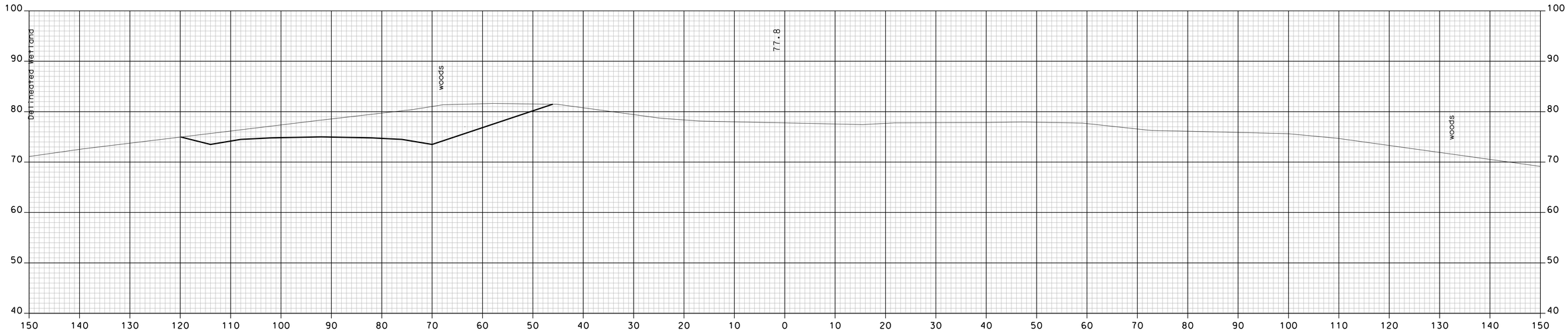
Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 3185.6 C.Y. ROCK EXCAV. – C.Y.

FILL 74.9 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_BMP	10044G	178	179



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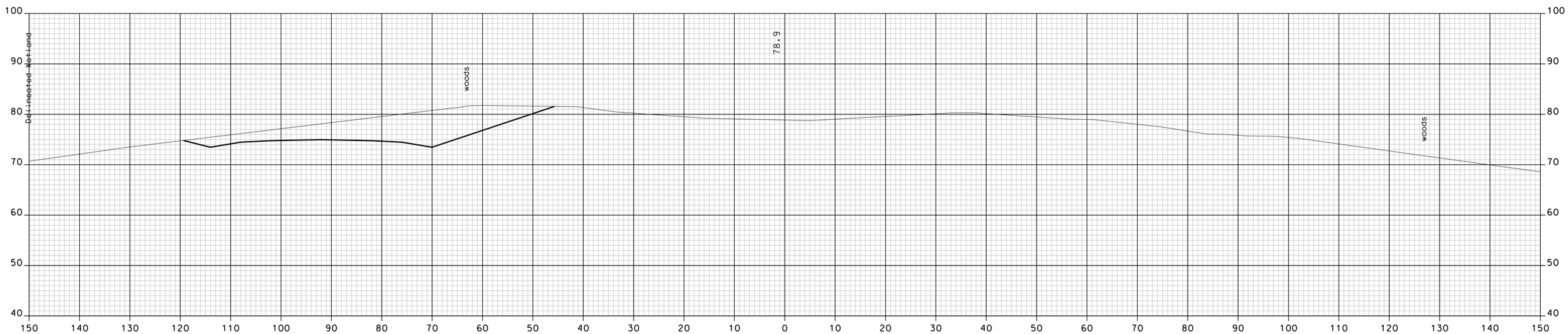

16+00

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	VHB TEAM	DATE 7/2009
NEW DESIGN	F. KOCZALKA	DATE 9/2014
SHEET CHECKED	A. GRANDE	DATE 8/2015
AS BUILT DETAILS		DATE

BMP #4

Vanasse Hangen Brustlin, Inc.

SHEET TOTALS

COMMON EXCAV. 0.0 C.Y. ROCK EXCAV. – C.Y.

FILL 0.0 C.Y. MUCK EXCAV. – C.Y.

DATE PLOTTED	VHB PROJECT NO.	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9/2/2015	51272.01	XS_BMP	10044G	179	179