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INDEX OF STANDARDS

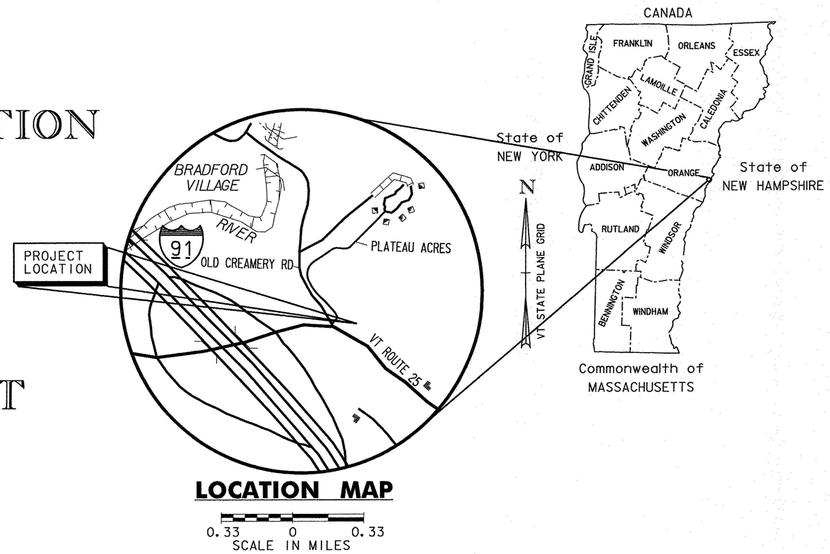
B-5	SLOPE GRADING, EMBANKMENTS, MUCK	06-01-1994
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E-180A	STREET LIGHTING DETAILS	08-09-1995
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T-1	TRAFFIC CONTROL GENERAL NOTES	08-06-2012
T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	08-06-2012
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STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENT
TOWN OF BRADFORD
COUNTY OF ORANGE
PARK AND RIDE LOT

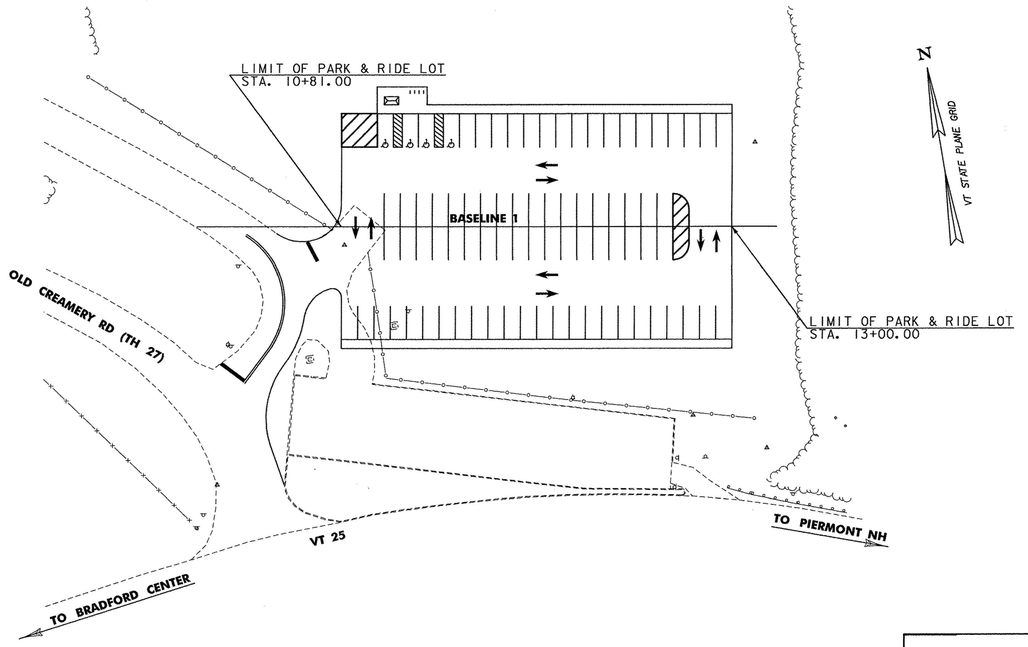
THIS PROJECT IS LOCATED ON THE NORTH SIDE OF VT ROUTE 25 IN THE TOWN OF BRADFORD, VT AT THE INTERSECTION OF ROUTE 25 AND OLD CREAMERY RD (TH27)

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES RECONSTRUCTION OF THE EXISTING PARK-AND-RIDE LOT, CONSTRUCTING A BUS SHELTER, PAVEMENT MARKINGS, LED LIGHTING, EV OUTLETS, LEVEL I AND OTHER HIGHWAY RELATED ITEMS.



LOCATION MAP

0.33 0 0.33
SCALE IN MILES



100 0 100
SCALE IN FEET

RECORD PLANS

CONTRACTOR: L&M SERVICE CONTRACTORS, LLC-ORFORD, NH

RESIDENT ENGINEER: PETE HODGSON

CONSTRUCTION BEGAN: MAY 14, 2015

CONSTRUCTION COMPLETE: SEPTEMBER 03, 2015

RECORD PLANS BY: PETE HODGSON & JESSE IVES

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY _____ RESIDENT ENGINEER

DATE 10/31/18

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL 3

SURVEYED BY : VAOT

SURVEYED DATE : 8/09

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83

Stantec

Stantec Consulting Services Inc.
55 Green Mountain Drive
South Burlington VT U.S.A. 05403
Phone: (802) 864-0223
Fax: (802) 864-0165
www.stantec.com

DIRECTOR OF PROGRAM DEVELOPMENT

APPROVED _____ DATE _____

PROJECT MANAGER : WAYNE L. DAVIS

PROJECT NAME : BRADFORD

PROJECT NUMBER : CMG PARK (33)

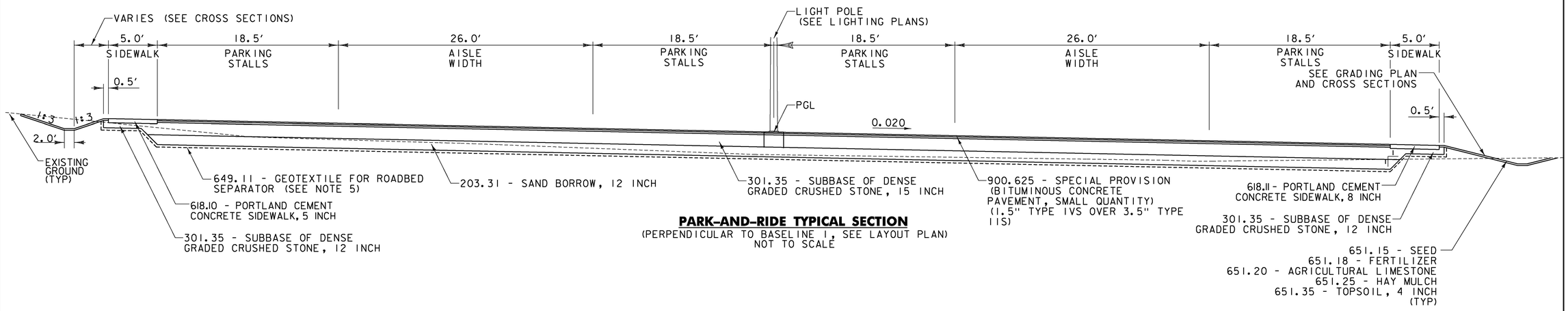
SHEET 1 OF 33 SHEETS

TYPICAL SECTIONS

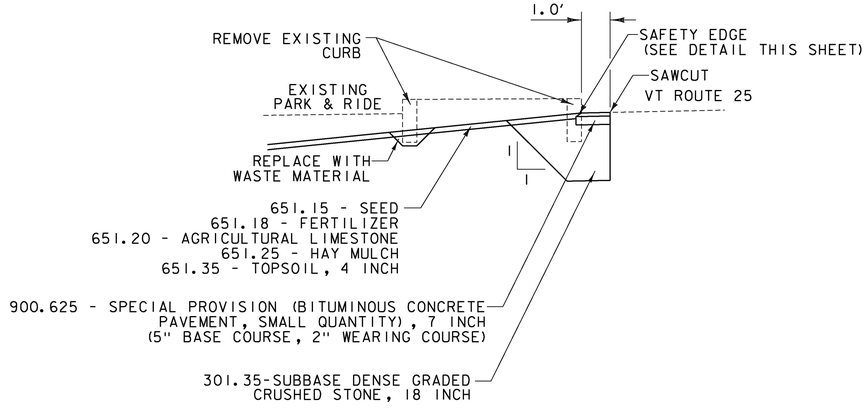
1½" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (1 LIFT - TYPE IVS)
3½" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (2 LIFT - TYPE IIS)
15" SUBBASE OF DENSE GRADED CRUSHED STONE
12" SAND BORROW
GEOTEXTILE FOR ROADBED SEPARATOR

MATERIAL ITEM THICKNESS /TOLERANCE

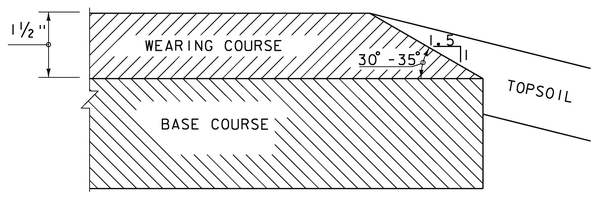
SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	+/- ¼ " (TOTAL DEPTH)
DENSE GRADED CRUSHED STONE	+/- 1"
SAND BORROW	+/- 1"



PARK-AND-RIDE TYPICAL SECTION
(PERPENDICULAR TO BASELINE 1, SEE LAYOUT PLAN)
NOT TO SCALE



CURB REMOVAL DETAIL
NOT TO SCALE



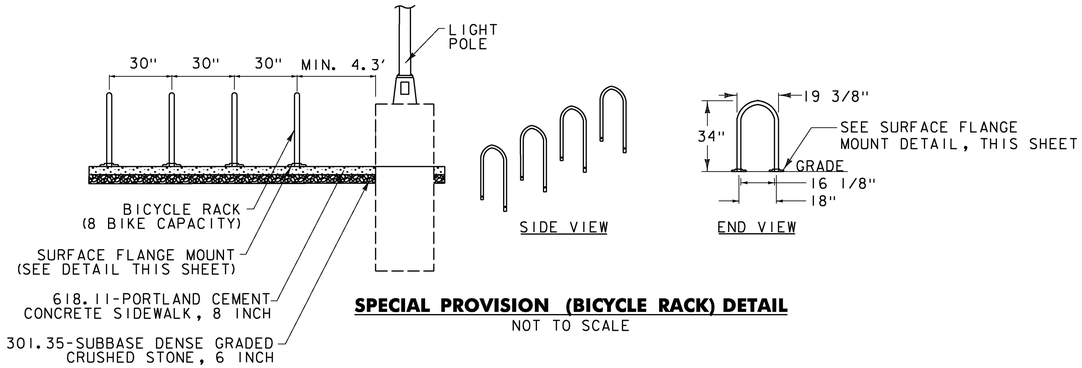
SAFETY EDGE DETAIL
NOT TO SCALE

GENERAL NOTES

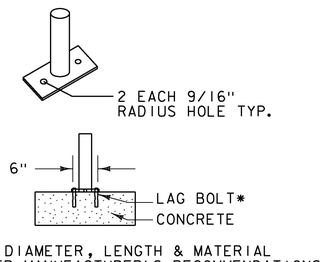
1. SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5 UNLESS OTHERWISE NOTED.
2. EMULSIFIED ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF PAVEMENT AND ON ALL COLD PLANED SURFACES AT THE RATE OF 0.025 GAL/SY OR AS DIRECTED BY THE ENGINEER.
3. SAW CUT PAID INCIDENTAL TO ITEM 900.680 SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY).
4. FOR PG BINDER GRADE SEE BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY OF SECTION 900 OF THE SPECIAL PROVISIONS.
5. GEOTEXTILE FOR ROADBED SEPARATOR TO BE USED AS DIRECTED BY THE ENGINEER.
6. THE EDGE OF PAVEMENT SHALL BE FORMED IN SUCH A WAY THAT THE BITUMINOUS CONCRETE PAVEMENT IS EXTRUDED OR COMPRESSED TO FORM THE 30 TO 35 DEGREE ANGLE. DEVICES THAT SIMPLY STRIKE-OFF THE MIX WITHOUT PROVIDING ANY COMPACTIVE EFFORT WILL NOT BE ALLOWED.

Stantec

PROJECT NAME: BRADFORD	
PROJECT NUMBER: CMG PARK (33)	
FILE NAME: z09K252frm.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
TYPICAL SECTIONS SHEET 1	SHEET 2 OF 33



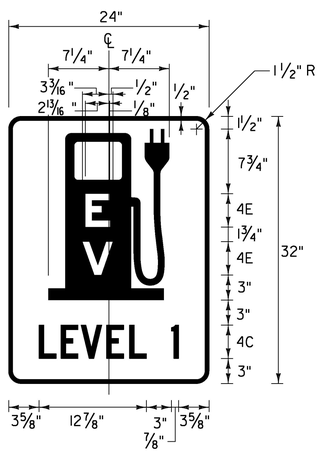
SPECIAL PROVISION (BICYCLE RACK) DETAIL
NOT TO SCALE



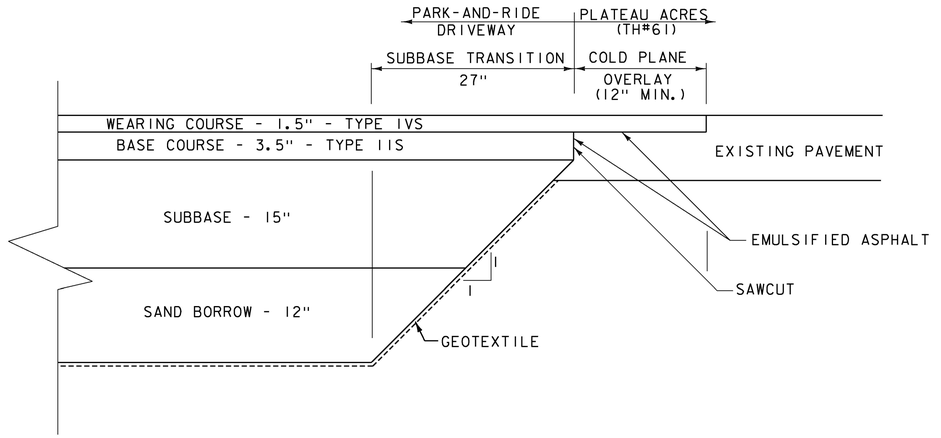
* DIAMETER, LENGTH & MATERIAL
PER MANUFACTURER'S RECOMMENDATIONS

SURFACE FLANGE MOUNT DETAIL
NOT TO SCALE

NOTE: BICYCLE RACK, SURFACE FLANGE MOUNT, AND LAG BOLTS TO BE PAID UNDER ITEM 900.620 SPECIAL PROVISION (BICYCLE RACK).



EV OUTLET, LEVEL 1 – SIGN DETAIL
SEE SHEETS 13 & 14 FOR PLACEMENT



PAVEMENT & SUBBASE TRANSITION TYPICAL (DRIVEWAY)
NOT TO SCALE

SEEDING FORMULA: LOW GROW / FINE FESCUE				
	LBS/AC			
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %
37.6%	75.2	94	CREEPING RED FESCUE/DEN	90%
28.4%	56.8	71	SPARTAN HARD FESCUE	85%
14.4%	28.8	36	AZAY SHEEPS FESCUE	87%
14.2%	28.4	35.5	ANNUAL RYEGRASS	90%
1.0%	2	2.5	CROP	
4.3%	8.6	10.8	INERT	
0.1%	0.2	0.2	WEED	
100%	200	250		

PERCENT OF SEED, CROP, WEED OR INERT MAY VARY +/- 2%. VARIETIES OF GRASSES MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM RESIDENT ENGINEER.

MOWING: RECOMMENDED EARLY MOWING ONCE OR TWICE WHEN GRASS REACHES 6 INCHES HEIGHT MAXIMUM TO PREVENT BROADLEAF WEED COMPETITION DURING ESTABLISHMENT PERIOD.

FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED

TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: G. SANTY
DESIGNED BY: I. MAYNARD
TYPICAL SECTIONS SHEET 2

PLOT DATE: 5/22/2014
DRAWN BY: I. MAYNARD
CHECKED BY: M. FOISY
SHEET 3 OF 33

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
						ROADWAY	LANDSCAPING	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						2800				2800		CY	COMMON EXCAVATION	203.15	8			
						150				150		CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28	8			
						1075				1075		CY	SAND BORROW	203.31	12			
						62				62		CY	TRENCH EXCAVATION OF EARTH	204.20	1			
						2				2		CY	TRENCH EXCAVATION OF ROCK	204.21	-			
						1				1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	-			
						6				6		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	-			
						1470				1470		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	5			
						14				14		CWT	EMULSIFIED ASPHALT	404.65	1			
						1				1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-			
						120				120		LB	REINFORCING STEEL, LEVEL I	507.11	1			
						1				1		GAL	WATER REPELLENT, SILANE	514.10	0.6			
						2				2		CY	CONCRETE, CLASS B	541.25	0.5			
						44				44		LF	18" CPEP(SL)	601.2615	-			
						2				2		EACH	18" CPEPES	601.7015	-			
						212				212		LF	CLEANING CULV. PIPE, IN-PLACE [0 TO 24 IN., INCL.]	601.995	-			
						1				1		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	EST.			
						10				10		HR	POWER BROOM RENTAL, TYPE I	608.30	EST.			
						1				1		HR	TRUCK RENTAL	608.37	EST.			
						140				140		MGAL	DUST CONTROL WITH WATER	609.10	4			
						750				750		LF	REMOVAL OF EXISTING CURB	616.41	7			
						260				260		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH	618.11	2			
						5				5		EACH	YIELDING MARKER POSTS	619.17	-			
						280				280		LF	REMOVAL OF EXISTING FENCE	620.55	-			
						90				90		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.			
						300				300		HR	FLAGGERS	630.15	EST.			
									1	1		LS	FIELD OFFICE, ENGINEERS	631.10	-			
									1	1		LS	TESTING EQUIPMENT, CONCRETE	631.16	-			
									1	1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-			
									3000	3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	-			
						1				1		LS	MOBILIZATION/DEMOBILIZATION	635.11	-			
						1				1		LS	TRAFFIC CONTROL	641.10	-			
						28				28		DAY	PORTABLE CHANGEABLE MESSAGE SIGN RENTAL	641.17	-			
													BEGIN OPTION AA					
						2100				2100		LF	DURABLE 4 INCH WHITE LINE, THERMOPLASTIC	646.402	14			
						2100				2100		LF	DURABLE 4 INCH WHITE LINE, POLYUREA	646.404	14			
													END OPTION AA					
													BEGIN OPTION BB					
						200				200		LF	DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC	646.412	6			
						200				200		LF	DURABLE 4 INCH YELLOW LINE, POLYUREA	646.414	6			

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
QUANTITIY SHEET 1

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 4 OF 33

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
						ROADWAY	LANDSCAPING	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
													END OPTION BB					
													BEGIN OPTION CC					
						30				30		LF	DURABLE 24 INCH STOP BAR, THERMOPLASTIC	646.482	1			
						30				30		LF	DURABLE 24 INCH STOP BAR, POLYUREA	646.484	1			
													END OPTION CC					
													BEGIN OPTION DD					
						12				12		EACH	DURABLE LETTER OR SYMBOL, THERMOPLASTIC	646.492				
						12				12		EACH	DURABLE LETTER OR SYMBOL, POLYUREA	646.494				
													END OPTION DD					
						55				55		SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	1			
						3450				3450		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11	34			
								60		60		SY	GEOTEXTILE FOR SILT FENCE	649.51	4			
								145		145		LB	SEED	651.15	4			
								400		400		LB	FERTILIZER	651.18	8			
								2		2		TON	AGRICULTURAL LIMESTONE	651.20	-			
								2		2		TON	HAY MULCH	651.25	-			
								420		420		CY	TOPSOIL	651.35	2			
								1		1		LS	EPSC PLAN	652.10	-			
								200		200		HR	MONITORING EPSC PLAN	652.20	EST.			
								1		1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	-			
								5		5		CY	TEMPORARY STONE CHECK DAM, TYPE I	653.25	0.6			
								65		65		CY	VEHICLE TRACKING PAD	653.35	5			
								2		2		EACH	INLET PROTECTION DEVICE, TYPE I	653.40	-			
								1		1		EACH	INLET PROTECTION DEVICE, TYPE II	653.41	-			
								600		600		LF	PROJECT DEMARCATION FENCE	653.55	7			
							6			6		EACH	DECIDUOUS TREES (ACER RUBRUM)(B&B)(2.5"-3" CAL.)	656.30				
							16			16		CY	LANDSCAPE BACKFILL, TRUCK MEASUREMENT	656.80	-			
						66.33				66.33		SF	TRAFFIC SIGNS, TYPE A	675.20	-			
						105				105		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	-			
						13				13		EACH	REMOVING SIGNS	675.50	-			
						3				3		EACH	ERECTING SALVAGED SIGNS	675.60	-			
						632				632		LF	WIRED CONDUIT (2")(PVC)(SCH. 80)	678.23				
						140				140		LF	WIRED CONDUIT (3")(PVC)(SCH. 80)	678.23				
						1				1		EACH	JUNCTION BOX	678.26	-			
						120				120		LF	ELECTRICAL CONDUIT SLEEVE (4")(PVC)	678.30	2			
						8				8		EACH	LIGHT POLE BASE	679.21	-			
						8				8		EACH	LIGHT POLE	679.45	-			
						11				11		EACH	BRACKET ARM	679.47	-			
						1				1		EACH	POWER DROP STANCHION, STREET LIGHTING	679.55	-			
						1				1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			

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PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
QUANTITIY SHEET 2

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 5 OF 33

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

SUMMARY OF ESTIMATED QUANTITIES

ROADWAY	LANDSCAPING	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
1				1		EACH	SPECIAL PROVISION (BICYCLE RACK)	900.620	-
10				10		EACH	SPECIAL PROVISION (ELECTRIC VEHICLE OUTLET, LEVEL1)	900.620	-
11				11		EACH	SPECIAL PROVISION (LUMINAIRE, LED)	900.620	-
1				1		EACH	SPECIAL PROVISION (REMOVE EXISTING ELECTRIC POWER METER)	900.620	-
3				3		EACH	SPECIAL PROVISION (REMOVE EXISTING LIGHT POLE)	900.620	-
1				1		LS	SPECIAL PROVISION (BUS SHELTER)	900.645	-
1				1		LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY)(N.A.B.I.)	900.650	-
1				1		LU	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT)(N.A.B.I.)	900.650	-
940				940		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680	9

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)
645	TON	PARKING LOT & ENTRANCE (TYPE IVS)
276	TON	PARKING LOT & ENTRANCE (TYPE IIS)
10	TON	CURB REMOVAL
9	TON	ROUNDING
940	TON	TOTAL

Stantec

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PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
QUANTITIY SHEET 3

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 6 OF 33

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK VOLUME	ROCK EXCAVATION AREA	ROCK EXCAVATION VOLUME	EMBANKMENT AREA	EMBANKMENT VOLUME		
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.		
BRADFORD PARK-AND-RIDE									
PARK-AND-RIDE:									
10+50		18				0			
	25		117				0		
10+75		235				0			
	6		75				0		
10+81		442				0			
	19		302				0		
11+00		416				0			
	25		385				0		
11+25		416				1			
	25		338				2		
11+50		313				3		CUT	2786
	25		263				4	ROCK	0
11+75		254				5		R.FAC	0.495
	25		240				5	FILL	45
12+00		264				5		F.FAC	1.15
	25		245				7	EX. C	2734
12+25		266				11			
	25		249				14		
12+50		272				19			
	25		264				11		
12+75		298				5			
	25		308				2		
13+00		368				0			

SUMMARY AND BALANCES

STATION TO STATION		TOT EXC. EARTH & ROCK C.Y.	ROCK EXCAV C.Y.	EMBANK C.Y.	EXCESSES CUT	EXCESSES FILL	ACUMULATIVE EXCESSES CUT	ACUMULATIVE EXCESSES FILL
10+50.00	13+00.00	2786	0	45	2734		2734	
TOTALS		2786	0	45				

REMARKS

EARTH AND ROCK EXCAVATION	2786
SOLID ROCK EXCAVATION	0
EARTH EXCAVATION	2786
PLANIMETERED FILL	45
LESS FACTORED SOLID ROCK	0
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	0
NET PLANIMETERED FILL	45
FACTOR	1.15
PLANIMETERED FILL INCLUDING FACTOR	52
MATERIALS AVAILABLE FOR FILLS	
EARTH EXCAVATION	2786
CHANNEL EXCAVATION	0
UNDERDRAIN EXCAVATION	0
STRUCTURE EXCAVATION	0
BUS SHELTER EXCAVATION	6
TOTAL MATERIAL AVAILABLE FOR FILL	2792
TOTAL FILL INCLUDING FACTOR	52
TOTAL MATERIAL FOR FILL	2792
BORROW	
EXCESS EXCAVATION	2740

Stantec

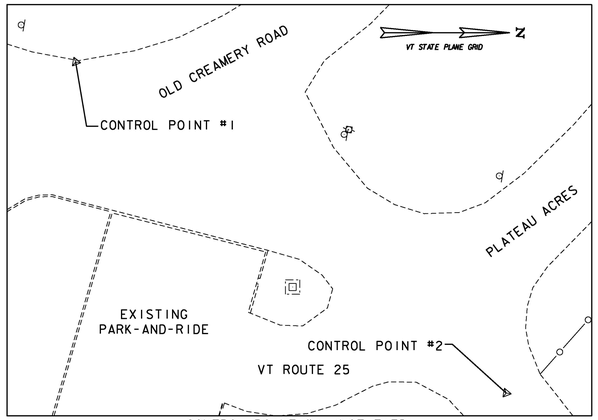
PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
EARTHWORK SHEET

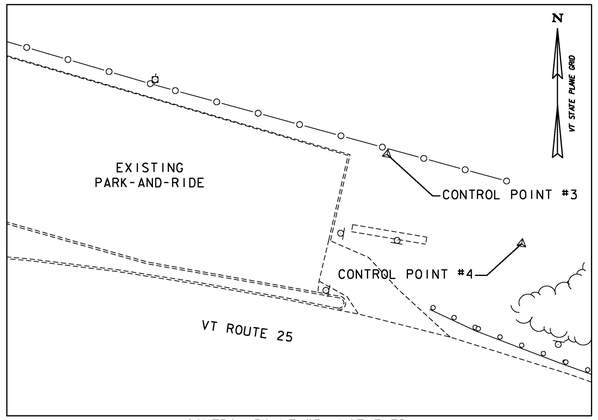
PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 7 OF 33

GPS CONTROL POINTS

TRAVERSE TIES



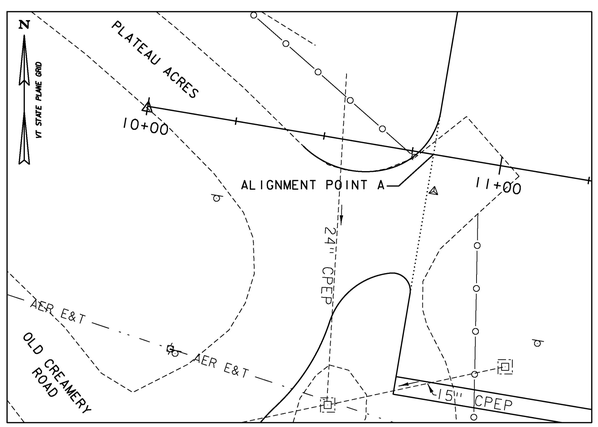
CONTROL POINT #1 (NOT TIED)
CONTROL POINT #2 (NOT TIED)



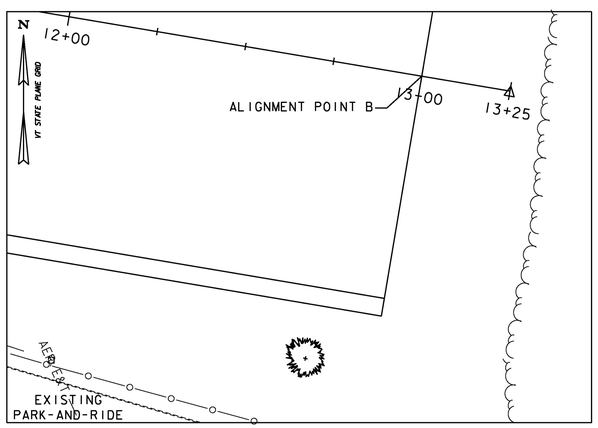
CONTROL POINT #3 (NOT TIED)
CONTROL POINT #4 (NOT TIED)

CONTROL POINTS			
POINT	NORTHING	EASTING	ELEVATION
1	541217.494'	1738257.007'	486.26'
2	541337.872'	1738349.568'	486.49'
3	541211.490'	1738826.733'	586.86'
4	541186.546'	1738564.363'	487.11'

ALIGNMENT TIES



ALIGNMENT POINT A



ALIGNMENT POINT B

ALIGNMENT POINTS				
POINT	NORTHING	EASTING	STATION	ELEVATION
A	541348.228'	1738349.511'	10+81.00	486.85'
B	541311.846'	1738565.465'	13+00.00	489.58'

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83
ADJUSTMENT	none

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
SURVEY CONTROL AND TIES

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 8 OF 33

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⊡	BNDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
◎	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCH MARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALUE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH 'L'
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PROJECT DEMARCATION FENCE (PDF)
- BARRIER FENCE (BF)
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE LINE — STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6F — 6F PROPERTY BOUNDARY
- 4F — 4F PROPERTY BOUNDARY
- HAZ — HAZ HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- FILTER CURTAIN
- SILT FENCE
- SILT FENCE WOVEN WIRE
- CHECK DAM
- DISTURBED AREAS REQUIRING RE-VEGETATION
- EROSION MATTING
- STABILIZED CONSTRUCTION ENTRANCE
- STONE & BLOCK DROP INLET PROTECTION
- FILTER FABRIC INLET PROTECTION
- PIPE INLET PROTECTION

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- THREATENED & ENDANGERED SPECIES
- HAZ — HAZ HAZARDOUS WASTE AREA
- AGRICULTURAL LAND
- FISH & WILDLIFE HABITAT
- FLOOD PLAIN
- ORDINARY HIGH WATER (OHW)
- STORM WATER
- USDA FOREST SERVICE LANDS
- WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

- ARCHEOLOGICAL BOUNDARY
- HISTORIC DISTRICT BOUNDARY
- HISTORIC AREA
- Ⓗ HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
CONVENTIONAL SYMBOLOGY & LEGEND SHEET SHEET 9 OF 33

GENERAL NOTES:

1. FOR A SUMMARY OF CONTROL POINTS, TRAVERSE TIES AND ALIGNMENT LAYOUT POINTS, SEE SURVEY CONTROL AND TIES SHEET
2. FOR SIGNS AND PAVEMENT MARKINGS SEE SIGNING AND PAVEMENT MARKING PLAN.
3. FOR PARK-AND-RIDE LIGHTING SEE LIGHTING AND LANDSCAPE PLAN, AND LIGHTING DETAILS.
4. DURING CONSTRUCTION ACCESS SHALL BE MAINTAINED TO THE EXISTING PARK-AND-RIDE WHICH WILL REMAIN OPEN. ONCE NEW PARK-AND-RIDE IS OPEN TO TRAFFIC, EXCAVATE EXISTING PAVED/GRAVEL PARK-AND-RIDE (8" +/- 1"). HARROW SUBSURFACE TO BREAK UP COMPACTED BASE. PAID AS ITEM 203.28 EXCAVATION OF SURFACES AND PAVEMENTS. PLACE 4" OF TOPSOIL, SEED, FERTILIZER, LIMESTONE AND MULCH PER SEEDING FORMULA ON TYPICAL SECTIONS SHEET 2. REMOVAL OF THE EXISTING CONCRETE BARRIER SHALL BE INCIDENTAL TO THIS WORK.
5. THE BUS SHELTER SHALL BE PAID UNDER ITEM 900.645. SPECIAL PROVISION (BUS SHELTER). FOR DETAIL OF PAY LIMITS UNDER THE SPECIAL PROVISION (BUS SHELTER) ITEM, REFER TO BUS SHELTER DETAILS.
6. THE BICYCLE RACK SHALL BE PAID UNDER ITEM 900.620 SPECIAL PROVISION (BICYCLE RACK). FOR BICYCLE RACK DETAILS, SEE TYPICAL SECTIONS SHEET 1.

LAYOUT POINT SUMMARY

LEGEND: LP#X = LAYOUT POINT #X

LAYOUT POINT	DESCRIPTION	COORDINATES	STATION
1	PC OF 20' RADIUS	N: 541301.38 E: 1738320.46	STA. 10+60.13, 51.03' RT.
2	PCC OF 20' & 5' RADIUS	N: 541315.04 E: 1738337.53	STA. 10+74.70, 34.71' RT.
3	PT OF 5' RADIUS	N: 541309.23 E: 1738342.94	STA. 10+81.00, 39.54' RT.
4	CORNER OF SIDEWALK	N: 541286.10 E: 1738339.04	STA. 10+81.00, 63.00' RT.
5	CORNER OF SIDEWALK	N: 541249.72 E: 1738555.00	STA. 13+00.00, 63.00' RT.
6	CORNER OF LOT	N: 541373.97 E: 1738575.93	STA. 13+00.00, 63.00' LT.
7	CORNER OF LOT	N: 541410.35 E: 1738359.98	STA. 10+81.00, 63.00' LT.
8	PC OF 20' RADIUS	N: 541360.22 E: 1738351.53	STA. 10+81.00, 12.16' LT.
9	PCC OF 25' & 20' RADIUS	N: 541344.14 E: 1738336.65	STA. 10+69.00, 6.17' RT.
10	PT OF 25' RADIUS	N: 541350.53 E: 1738313.10	STA. 10+44.71, 3.77' RT.
11	PCC OF 56.5' & 50' RADIUS	N: 541277.77 E: 1738305.39	STA. 10+49.19, 76.81' RT.
12	PT OF 50' RADIUS	N: 541231.94 E: 1738290.43	STA. 10+42.05, 124.49' RT.

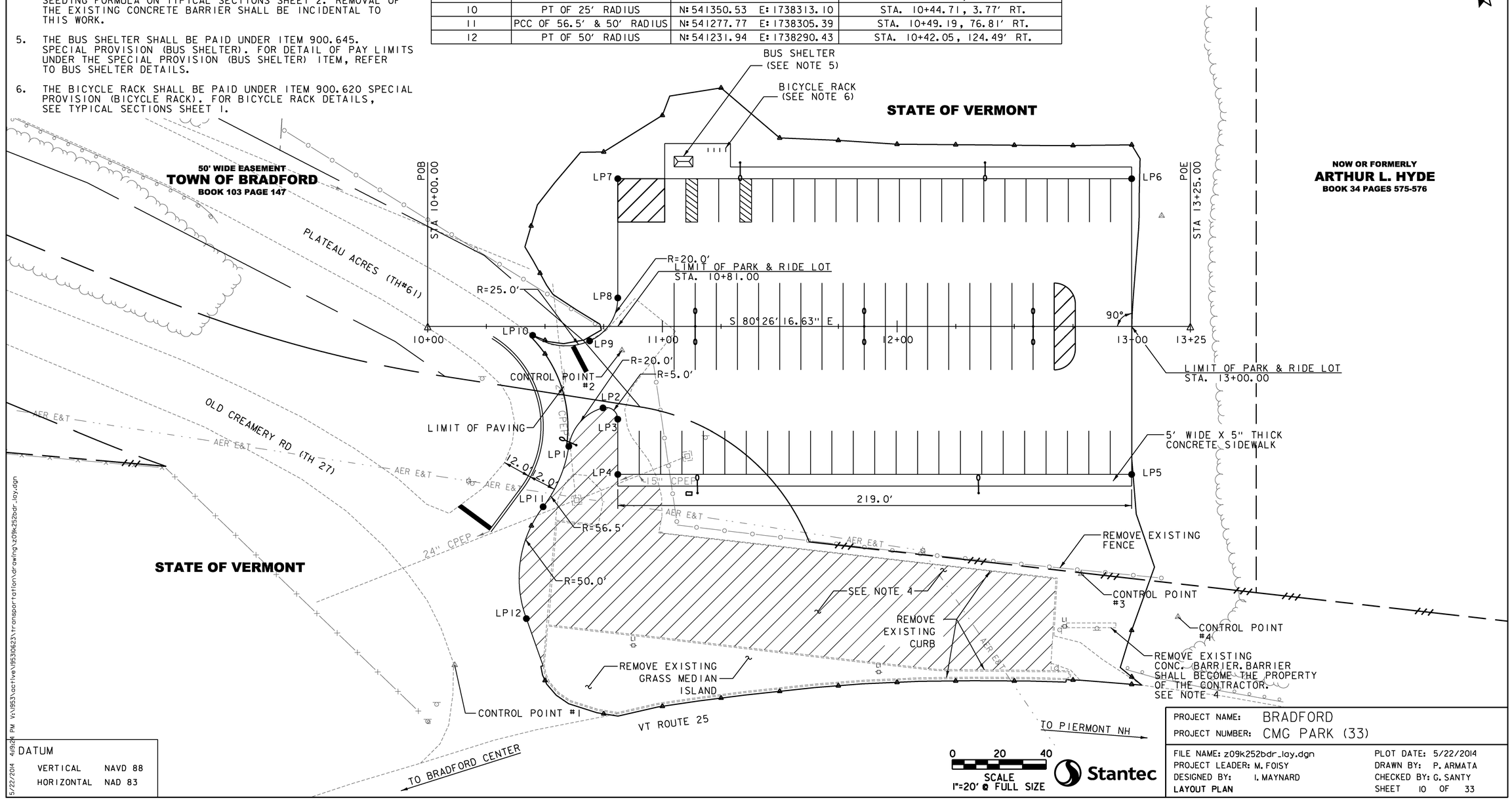
REMOVAL OF EXISTING CURB
STA. 10+49.2, 144.6' RT - 12+74.0, 148.6' RT

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA. 10+81.0, 63.0' RT - 13+00.0, 63.0' RT

REMOVAL OF EXISTING FENCE
STA. 10+96.0, 14.3' RT - 13+14.1, 107.3' RT

SPECIAL PROVISION (BICYCLE RACK)
STA. 10+99.5, 74.4' RT - 11+07.0, 74.4' RT

SPECIAL PROVISION (BUS SHELTER)
STA. 10+85.0, 68.1' RT - 10+93.0, 68.1' RT

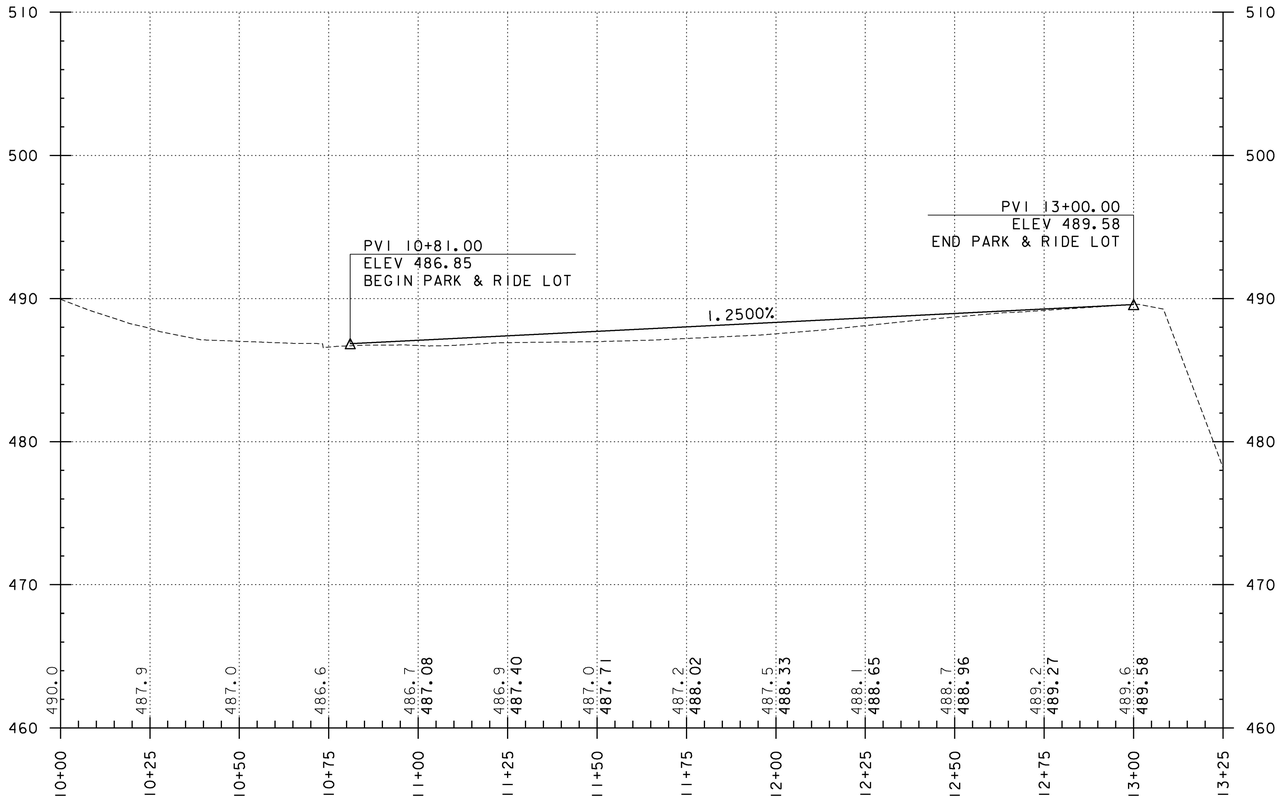


DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83

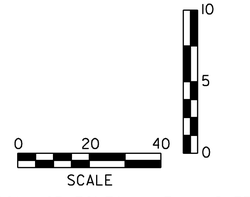
Stantec

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09k252bdr_lay.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
LAYOUT PLAN	SHEET 10 OF 33

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NOTE:
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG CONSTRUCTION BASELINE.
ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISHED GRADE ALONG CONSTRUCTION BASELINE.



1"=20' HORIZONTAL @ FULL SIZE
1"= 5' VERTICAL @ FULL SIZE

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09k252xs.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
PROFILE

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 11 OF 33

NEW DRAINAGE PIPE

(100) STA. 10+72.1, 61.1' LT - 11+05.8, 70.5' LT
18" X 40' CPEP (SL)
END SECTION AT INLET AND OUTLET

CLEANING CULV. PIPE IN PLACE [0 TO 24 IN., INCL.]
STA. 10+53.3, 18.2' LT - 10+63.1, 73.0' RT (24" CPEP)
STA. 9+52.5, 117' RT - 10+63.1, 73.0' RT (24" CPEP)

N

VT STATE PLANE GRID

INVERT ELEV. 486.75

EXISTING INVERT ELEV. 482.98

EXISTING INVERT ELEV. 484.48

(100)

POB STA 10+00.00

POE STA 13+25.00

INVERT ELEV. 486.00

PLATEAU ACRES (TH#61)

10+00 11+00 12+00 13+00 13+25

CLEAN EXISTING 24" CPEP

OLD CREAMERY RD (TH 27)

AER E&T

EXISTING INVERT ELEV. 480.24

EXISTING INVERT ELEV. 480.15

15" CPEP

REMOVE EXISTING DI

CLEAN EXISTING 24" CPEP

REMOVE EXISTING 15" CPEP

PLUG 15" INLET. INCIDENTAL TO CULVERT CLEANING

EXISTING GRATE ELEV. 484.83

VT ROUTE 25

TO PIERMONT NH

TO BRADFORD CENTER

0 20 40
SCALE
1"=20' @ FULL SIZE

Stantec

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09k252bdr_drn.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
GRADING AND DRAINAGE PLAN	SHEET 12 OF 33

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OPTION
646.402 - DURABLE 4" WHITE LINE, THERMOPLASTIC
646.404 - DURABLE 4" WHITE LINE, POLYUREA
STA. 10+00 TO 13+25, LT & RT (PARKING SPACES AND DIAGONALS)

OPTION
646.412 - DURABLE 4" YELLOW LINE, THERMOPLASTIC
646.414 - DURABLE 4" YELLOW LINE, POLYUREA
STA. 10+26 TO STA. 10+27, RT (CENTER LINE FOR PLATEAU ACRES)

OPTION
646.482 - DURABLE 24" STOP BAR, THERMOPLASTIC
646.484 - DURABLE 24" STOP BAR, POLYUREA
STA. 10+21, RT. (PLATEAU ACRES)
STA. 10+66, RT.

OPTION
646.492 - DURABLE LETTER OR SYMBOL, THERMOPLASTIC
646.494 - DURABLE LETTER OR SYMBOL, POLYUREA
STA. 10+85, RT. - ♿
STA. 10+89, RT. - †
STA. 10+98, RT. - †
STA. 11+02, RT. - ♿
STA. 11+11, RT. - ♿
STA. 11+25, RT. - ♿
STA. 11+96, LT. - †
STA. 11+96, LT. - †
STA. 11+96, RT. - †
STA. 11+96, RT. - †
STA. 12+83, RT. - †
STA. 12+91, RT. - †

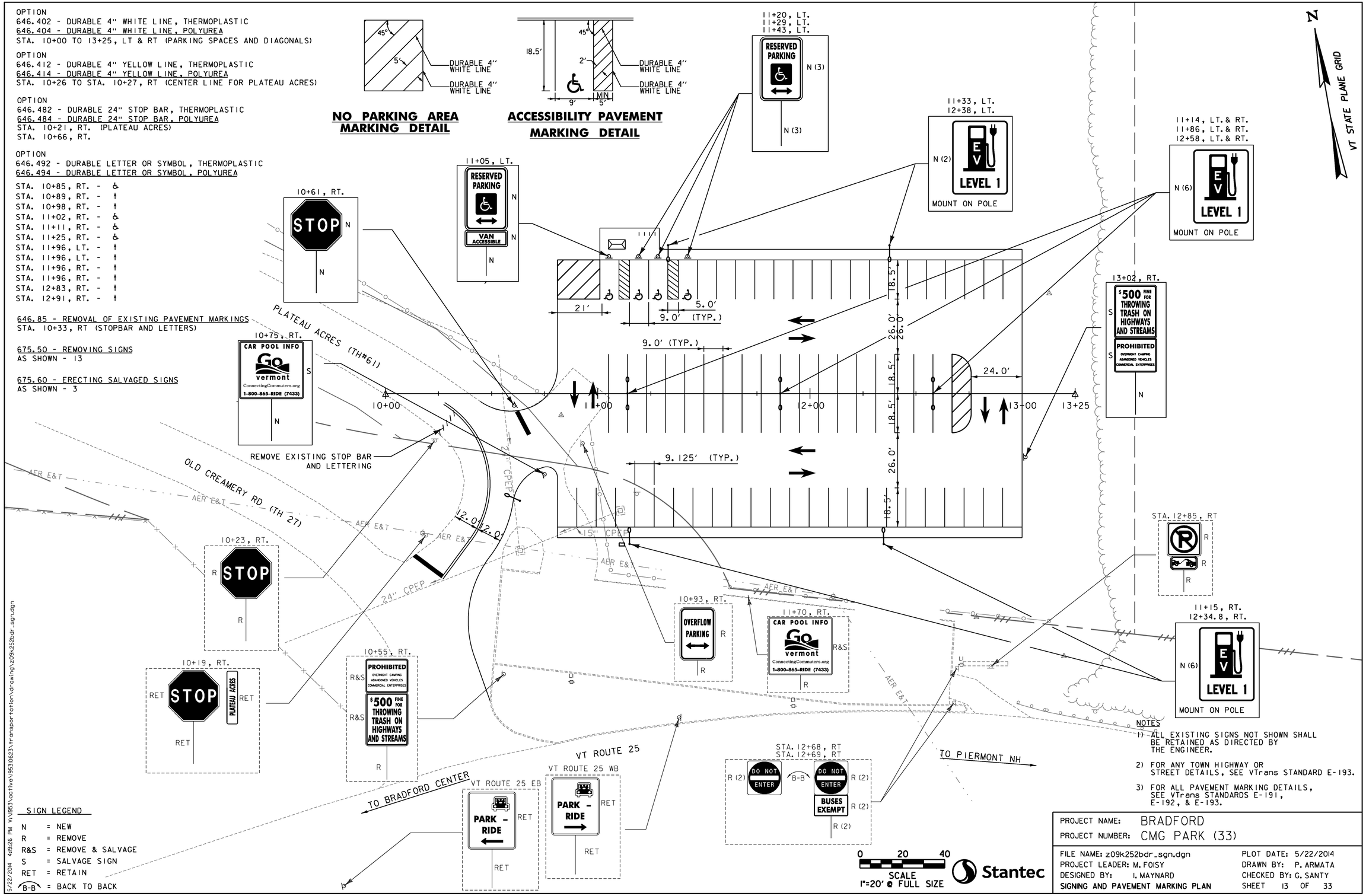
646.85 - REMOVAL OF EXISTING PAVEMENT MARKINGS
STA. 10+33, RT (STOPBAR AND LETTERS)

675.50 - REMOVING SIGNS
AS SHOWN - 13

675.60 - ERECTING SALVAGED SIGNS
AS SHOWN - 3

NO PARKING AREA MARKING DETAIL

ACCESSIBILITY PAVEMENT MARKING DETAIL



SIGN LEGEND

N	= NEW
R	= REMOVE
R&S	= REMOVE & SALVAGE
S	= SALVAGE SIGN
RET	= RETAIN
B-B	= BACK TO BACK

NOTES
1) ALL EXISTING SIGNS NOT SHOWN SHALL BE RETAINED AS DIRECTED BY THE ENGINEER.
2) FOR ANY TOWN HIGHWAY OR STREET DETAILS, SEE VTrans STANDARD E-193.
3) FOR ALL PAVEMENT MARKING DETAILS, SEE VTrans STANDARDS E-191, E-192, & E-193.

0 20 40
SCALE 1"=20' @ FULL SIZE

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09k252bdr_sgn.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
SIGNING AND PAVEMENT MARKING PLAN

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 13 OF 33

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STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET 01

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NO. OF POSTS	NEW SIGN POSTS: FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) lb/ft 1.75	2.0	2.5	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft 3.0	4.0	4.0 MOD	TUBULAR STEEL Ø (in) FOUNDATION	lb/ft 3.0	3.5	4.0	5.0	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL: DETAIL IN SHSM BOOK	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
BRADFORD																																				
BASELINE 1																																				
10+61, RT	STOP	1	30	30	6.25						1					15		X																	SIGN ID CODE R1-1	X		
10+75, RT	CAR POOL INFO Go vermont ConnectingCommuters.org 1-800-865-RIDE (7433)						1				1					15		X																			
11+05, LT	RESERVED PARKING	1	12	18	1.50						1					15		X	X																SIGN ID CODE R7-8	X		
11+14, LT&RT 11+15, RT 11+33, LT 11+86, LT&RT 12+34.8, RT 12+38, LT 12+58, LT&RT	EV LEVEL 1	10	24	32	53.33																													INSTALL SIGNS ON LIGHT POLE		3	
11+20, LT	RESERVED PARKING VAN ACCESSIBLE	1 1	12 12	18 9	1.50 0.75						1					15		X	X																SIGN ID CODE R7-8 "VAN ACCESSIBLE" SIGN TO BE INSTALLED BELOW THE "RESERVED PARKING". SIGN ID CODE R7-8P	X X		
11+29, LT	RESERVED PARKING	1	12	18	1.50						1					15		X	X																SIGN ID CODE R7-8	X		
11+43, LT	RESERVED PARKING	1	12	18	1.50						1					15		X	X																SIGN ID CODE R7-8	X		
13+02, RT	$500 FINE FOR THROWING TRASH ON HIGHWAYS AND STREAMS PROHIBITED OVERNIGHT CAMPING ABANDONED VEHICLES COMMERCIAL ENTERPRISES						1 1				1					15		X																"PROHIBITED" SIGN TO BE INSTALLED BELOW THE "$500 FINE" SIGN.			
												FT	FT	FT	FT	FT 105	FT		EA 4	LB	LB	LB		LB	LB	LB	LB										
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."	**TOTALS**		SF 66.33		SF	EA. 3	SF					FT			FT 105					LB			EA.	LB				EA.	EA.	LB						

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
TRAFFIC SIGN SUMMARY SHEET

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 14 OF 33

WIRED CONDUIT (2") (PVC) (SCH. 80)

LOCATION	DESCRIPTION
10+63.3, RT - 11+11.0, RT	SL-6 TO HH-1
11+11.0, RT - 11+14.0, CL	HH-1 TO SL-3
11+11.0, RT - 11+15.0, RT	HH-1 TO SL-5
11+15.0, RT - 12+34.8, RT	SL-5 TO SL-4
11+14.0, CL - 11+86.0, CL	SL-3 TO SL-2
11+86.0, CL - 12+58.0, CL	SL-2 TO SL-1
11+14.0, CL - 11+33.0, LT	SL-3 TO SL-7
11+33.0, LT - 12+38.0, LT	SL-7 TO SL-8
11+11.0, RT - 12+11.0, RT	UTILITY POLE TO METER
11+11.0, RT - 11+11.0, RT	METER TO HH-1
11+11.5, RT - 11+11.5, RT.	METER TO HH-1

WIRED CONDUIT (3") (PVC) (SCH. 80)

LOCATION	OFFSET	DESCRIPTION
12+11.0	95.6' RT.	UTILITY POLE
11+11.0	76.5' RT.	METER

POWER DROP STANCHION, STREET LIGHTING

11+11. RT.

ELECTRICAL CONDUIT SLEEVE (4") (PVC)

11+11.0, RT - 11+14.0, CL
11+14.0, CL - 11+14.0, LT

JUNCTION BOX

NO.	LOCATION
HH-1	11+11.0, RT.

LIGHT POLE, LIGHT POLE BASE, SPECIAL PROVISION (LUMINAIRE, LED)

POLE NO.	LOCATION	OFFSET	NO. OF LUMINAIRES
SL-1	12+58.0	CL	2
SL-2	11+86.0	CL	2
SL-3	11+14.0	CL	2
SL-4	12+34.8	71.0' RT	1
SL-5	11+15.0	71.0' RT	1
SL-6	10+63.3	50.5' RT	1
SL-7	11+33.0	70.0' LT	1
SL-8	12+38.0	70.0' LT	1

SPECIAL PROVISION (REMOVE EXISTING LIGHT POLE)

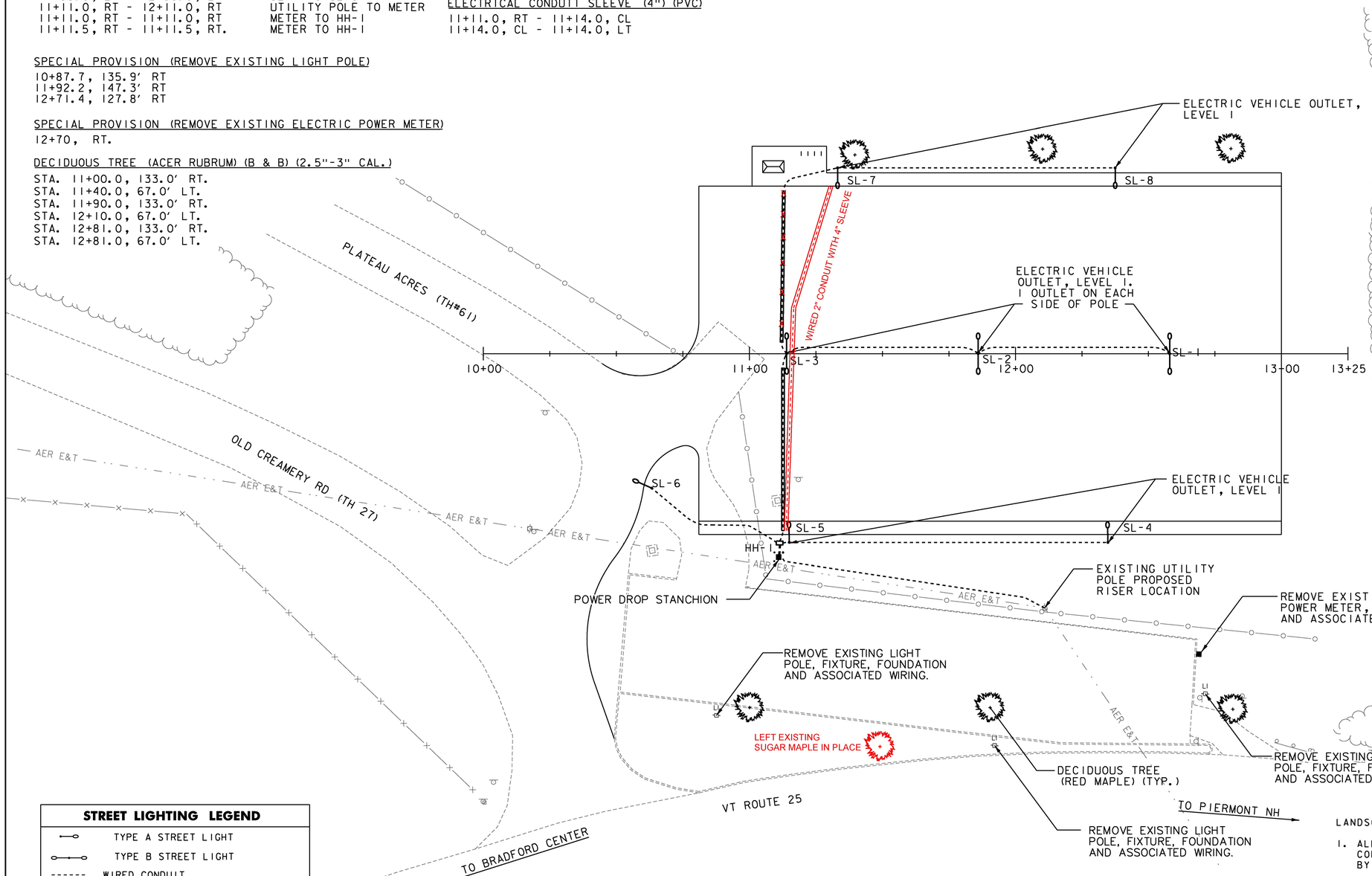
10+87.7, 135.9' RT
11+92.2, 147.3' RT
12+71.4, 127.8' RT

SPECIAL PROVISION (REMOVE EXISTING ELECTRIC POWER METER)

12+70, RT.

DECIDUOUS TREE (ACER RUBRUM) (B & B) (2.5"-3" CAL.)

STA. 11+00.0, 133.0' RT.
STA. 11+40.0, 67.0' LT.
STA. 11+90.0, 133.0' RT.
STA. 12+10.0, 67.0' LT.
STA. 12+81.0, 133.0' RT.
STA. 12+81.0, 67.0' LT.



STREET LIGHTING LEGEND

- TYPE A STREET LIGHT
- TYPE B STREET LIGHT
- WIRED CONDUIT
- WIRED CONDUIT IN CONDUIT SLEEVE
- JUNCTION BOX
- ELECTRIC SERVICE TRANSFORMER
- ELECTRIC METER
- LI — EXISTING LIGHT POLE

PLANT SCHEDULE:

QUANT	COMMON NAME	SCIENTIFIC NAME	SIZE	NOTES
6	RED MAPLE	ACER RUBRUM	2.5 - 3" CAL.	B&B

0 20 40
SCALE
1"=20' @ FULL SIZE

Stantec

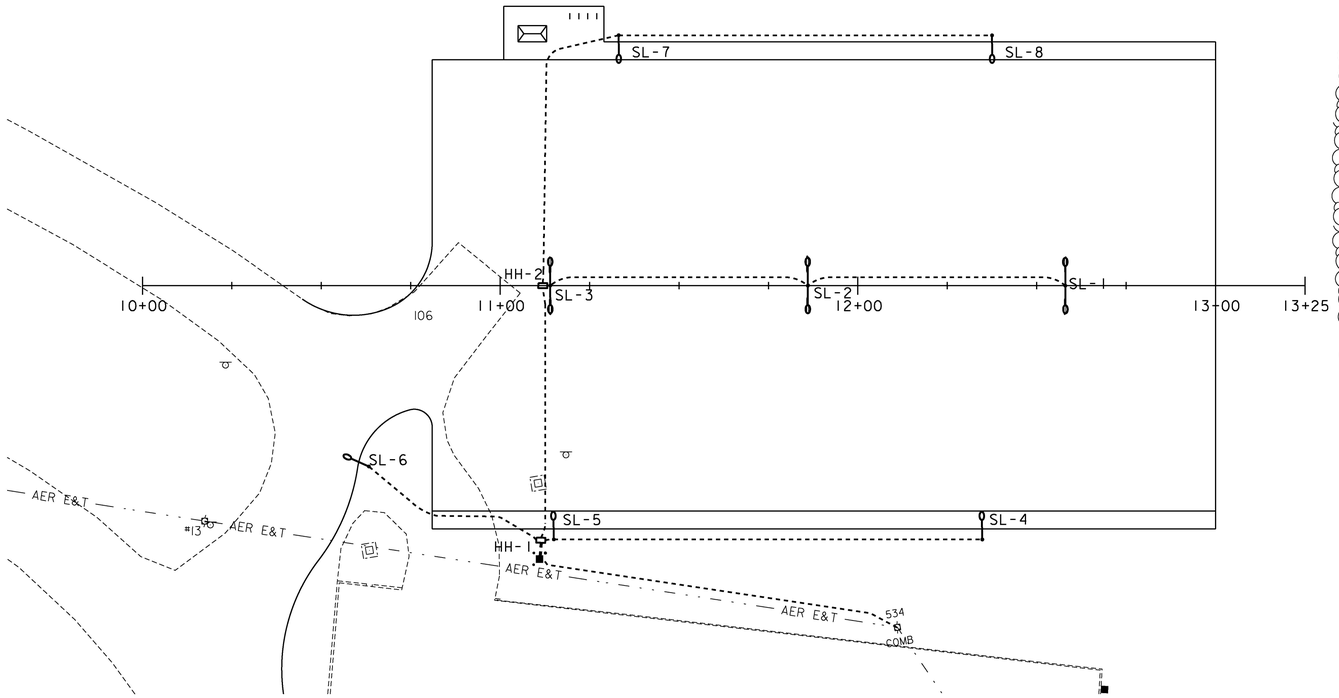
LANDSCAPING NOTES:

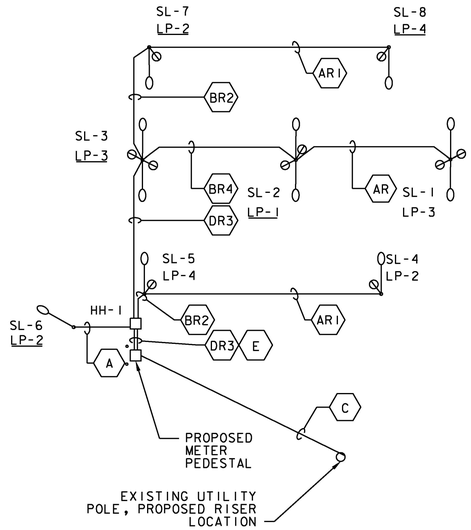
1. ALL DISTURBED SOILS SHALL BE REGRADED TO EXISTING CONDITIONS AND ALLOWED TO RESTABILIZE, AS DIRECTED BY THE ENGINEER.

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09k252bdr_lgt.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: M. CROWLEY
LIGHTING AND LANDSCAPE PLAN

PLOT DATE: 5/22/2014
DRAWN BY: I. MAYNARD
CHECKED BY: G. SANTY
SHEET 15 OF 33





SITE LIGHTING ONE-LINE

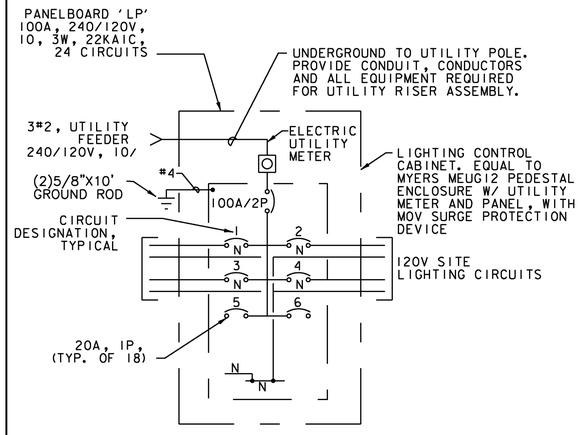
NOT TO SCALE

CONDUIT & CONDUCTOR SCHEDULE

KEY	CONDUIT SIZE	CONDUCTORS			
		FOR FIXTURES	FOR SERVICE	FOR RECEPTACLES	FOR GROUND
A	2"	2#10			1#10G
B	2"	4#10			1#10G
C	3"		3#2		1#8G
DR3	2 1/2"	8#10		16#6	1#10G
E	2"	PULLCORD			
AR	2"	2#10		4#6	1#10G
BR4	2"	4#10		8#6	1#10G
AR1	2"	2#10		2#6	1#10
BR2	2"	4#10		4#6	1#10

GENERAL NOTES:

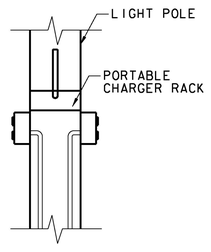
1. MAXIMUM OF 270° IN TOTAL BENDS PERMITTED IN SINGLE RUN OF CONDUIT.
2. LIGHTS SHALL BE FUSED AT BASE WITH Y-TYPE FUSE KIT WITH WATERPROOF INSULATED SEAL "FLOOD SEAL". SIZE OF SEAL SHALL MATCH WIRE AND HAVE A 10 AMP FUSE, AND MOV.
3. CIRCUIT CONDUCTORS INCLUDING NEUTRAL CONDUCTOR SHALL BE CLEARLY IDENTIFIED BY CORROSION RESISTANT TAGS INDICATING CIRCUIT NUMBER AND PANEL SOURCES AT EVERY POLE BASE AND HANDHOLE.
4. UTILIZE APPROVED DUAL-RATED PARALLEL TAP CONNECTOR WITH INSULATED COVER FOR TAPS AT POLE BASE.
5. UTILIZE APPROVED DUAL-RATED PARALLEL TAP CONNECTOR WITH WATERTIGHT CONNECTOR, SUITABLE FOR DIRECT BURIAL IN JUNCTION BOXES, HANDHOLES AND MANHOLES.



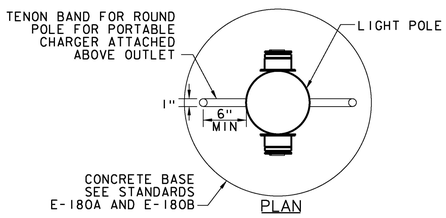
ONE-LINE DIAGRAM ROADWAY LIGHTING SERVICE PEDESTAL

NOT TO SCALE

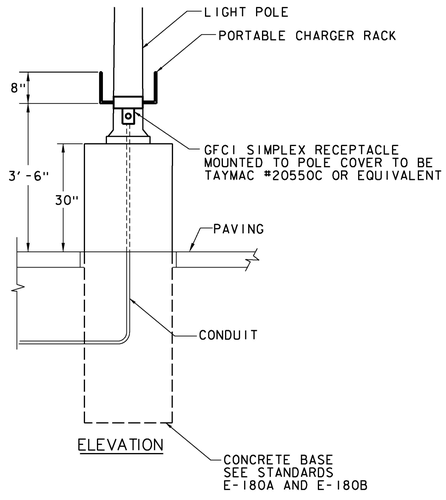
NOTE: NO RELAYS REQUIRED



ELEVATION 'A'



PLAN



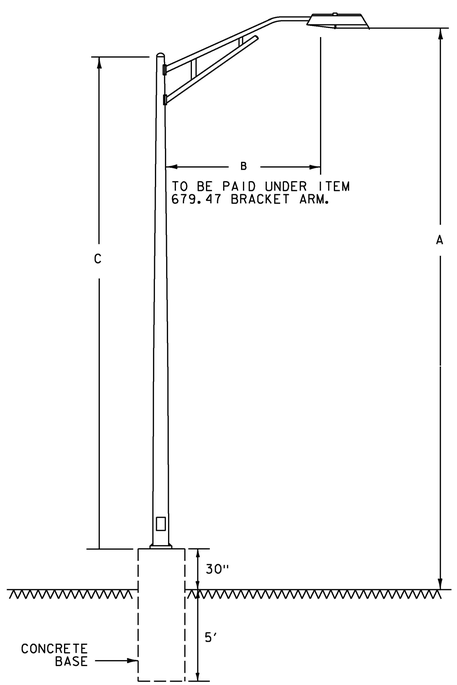
ELEVATION

SPECIAL PROVISION (ELECTRIC VEHICLE OUTLET, LEVEL 1)

NOT TO SCALE

Stantec

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09K252frm.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: M. CROWLEY	CHECKED BY: G. SANTY
LIGHTING DETAILS I	SHEET 16 OF 33

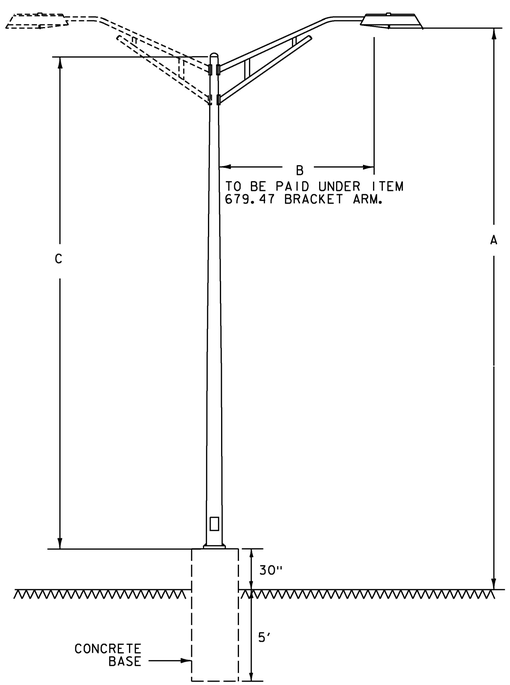


DIMENSIONS:

A = MOUNTING HEIGHT - 22.5'
B = LUMINAIRE SUPPORT ARM LENGTH - 8'
C = POLE HEIGHT - 20'

TYPE 'A' SITE LIGHT

NOT TO SCALE



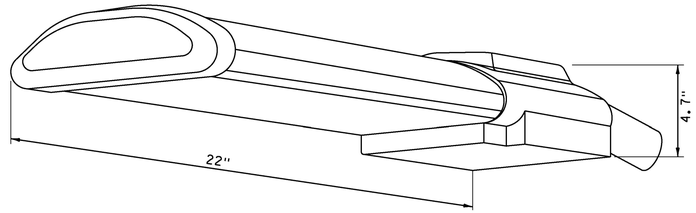
DIMENSIONS:

A = MOUNTING HEIGHT - 22.5'
B = LUMINAIRE SUPPORT ARM LENGTH - 8'
C = POLE HEIGHT - 20'

TYPE 'B' SITE LIGHT

NOT TO SCALE

SEE STANDARD E-180A
FOR ADDITIONAL INFORMATION



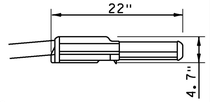
LUMINAIRE
STR-LWY-3MB-04-C-UL-BZ-525-R-SC

NOT TO SCALE

LUMINAIRE:
LENS FINISH: CLEAR FLAT GLASS

HOUSING: ALUMINUM

LAMP:
TYPE: 40 LEDS

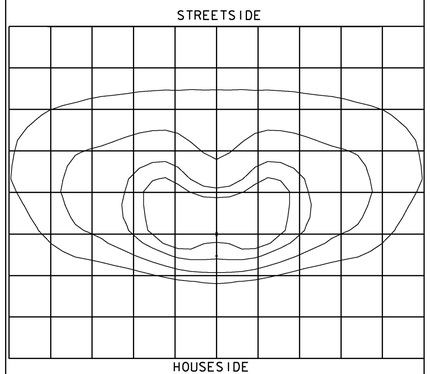


ANSI/IES TYPE:
TYPE III CUT-OFF OPTICS
WITH HOUSE SIDE SHIELD

LUMINAIRE: STR-LWY-3MB-04-C-UL-BZ-525-R-SC

LAMP: TYPE: LED

MOUNTING HEIGHT: 22'-6" POLES ON CONCRETE BASES = 20.0'



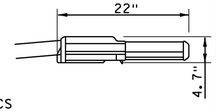
TYPE 'A' SITE LIGHT
ISO-FOOTCANDLE DATA

NOT TO SCALE

LUMINAIRE:
LENS FINISH: CLEAR FLAT GLASS

HOUSING: ALUMINUM

LAMP:
TYPE: (2) 40 LEDS

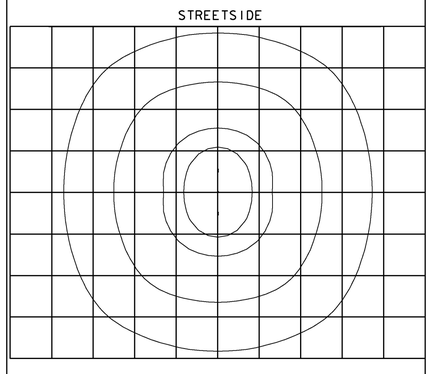


ANSI/IES TYPE:
TYPE III CUT-OFF OPTICS

LUMINAIRE: (2) STR-LWY-3MB-04-C-UL-BZ-525-R-SC

LAMP: TYPE: LED

MOUNTING HEIGHT: 22'-6" POLES ON CONCRETE BASES = 20.0'



TYPE 'B' SITE LIGHT
ISO-FOOTCANDLE DATA

NOT TO SCALE

Stantec

PROJECT NAME: BRADFORD	
PROJECT NUMBER: CMG PARK (33)	
FILE NAME: z09K252frm.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: M. CROWLEY	CHECKED BY: G. SANTY
LIGHTING DETAILS 2	SHEET 17 OF 33

GENERAL SITE LIGHT NOTES

CONCRETE BASES

FOR DETAILS SEE VTrans STANDARD SHEET E-180B.

WHEN CONCRETE BASES ARE INSTALLED IN SLOPING GROUND, THERE MUST BE A MINIMUM OF 5'-0" OF THE BASE IN THE GROUND.

CARE SHOULD BE TAKEN WHERE CONCRETE BASES, DRAINAGE STRUCTURES OR UTILITIES ARE CLOSE TOGETHER.

POLES, ANCHOR BASES AND ARMS

ALL NEW SITE LIGHT POLES AND LUMINAIRE ARMS SHALL BE ALUMINUM IN ACCORDANCE WITH SUBSECTION 753.01 (B) AND SHALL BE DARK BRONZE IN COLOR.

LUMINAIRES AND POLES

FOR LIGHT POLE DETAILS SEE VTRANS STANDARD SHEET E-180A.

LUMINAIRES SHALL HAVE A MOUNTING HEIGHT OF 22.5'. THE ARM LENGTH SHALL BE 4'.

TYPE A: ALUMINUM, DARK BRONZE, 'COBRA HEAD' TYPE LED, TYPE III, DISTRIBUTION, WITH SPILL LIGHT CONTROL EQUIVALENT TO : BETA LED CATALOG NO. STR-LWY-3MB-04-C-UL-BZ-525-R-SC WITH PHOTO CELL.

TYPE B: ALUMINUM, DARK BRONZE, 'COBRA HEAD' TYPE LED, TYPE V, DISTRIBUTION EQUIVALENT TO: BETA LED CATALOG NO. STR-LWY-3MB-04-C-UL-BZ-525-R-SC WITH PHOTO CELL.

POLES: TAPERED ALUMINUM, 20 FT. DARK BRONZE, WITH BASE COVER EQUIVALENT TO: GE LIGHTING SYSTEMS: RRTA-20-SA-6S-6.0-1-F

LUMINAIRE SHALL MEET THE ISO FOOTCANDLE DATA AND THE ILLUMINATION LEVELS AS DESCRIBED BELOW.

ILLUMINATION LEVELS

PARK AND RIDE SHALL HAVE AN AVERAGE OF 1.0fc., MINIMUM OF 0.2fc., WITH MIN/MAX RATIO OF 20:1, AND AN AVE/MIN UNIFORMITY OF BETWEEN 3:1 AND 4:1 OR BETTER.

CONDUIT

A 2 INCH (I.D.) MINIMUM CONDUIT SHALL BE USED AT ALL LOCATIONS UNLESS OTHERWISE NOTED ON THE PLANS, ALL CONDUIT SHALL BE SCHEDULE 80 PVC.

POWER DROP STANCHION

FOR DETAILS SEE VTrans STANDARD SHEET E-175.

MINIMUM 2" NEMA APPROVED PVC SCHEDULE 80 SHALL BE USED.

ATTACH CONDUIT ON SIDE OF POLE AWAY FROM TRAFFIC WHEN POSSIBLE.

INSTALL LOWEST STANDOFF BRACKET AT 7 FEET ABOVE GRADE. SPACE REMAINING STANDOFF BRACKETS APPROX. 5 FEET APART.

INSTALL SLIP JOINT APPROXIMATELY 2/3 OPEN.

TERMINATE CONDUIT WITH CONDULATOR FOR PRIMARY CABLE, OR WEATHERHEAD FOR SECONDARY CABLE.

SERVICE CONDUIT SHALL BE MINIMUM 2 INCH. SMALLER CONDUIT MAY BE ALLOWED WITH PRIOR APPROVAL FROM THE UTILITY AND THE ENGINEER AND AFTER CONSULTATION WITH THE ROADWAY, TRAFFIC & SAFETY, AND PAVEMENT MANAGEMENT SECTIONS.

WIRE

ALL WIRING BETWEEN THE METER AND/OR POWER SOURCE AND THE FIRST POLE AND/OR JUNCTION BOX AND BETWEEN POLES AND/OR PULLBOXES SHALL BE COPPER AND SIZED AS SPECIFIED ON THE PLANS. ALL WIRE SHALL HAVE TYPE XHHW INSULATION OR EQUIVALENT.

GROUNDING

ALL CONDUIT MUST INCLUDE A GROUNDING CONDUCTOR. RIGID STEEL CONDUIT SHALL BE PROPERLY CONNECTED AT THE JOINTS SO AS TO BE WATERTIGHT AND MAINTAIN ELECTRICAL CONTINUITY AND HAVE GROUNDING BUSHINGS SO AS TO ACT AS A GROUND CONDUCTOR.

ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.

PULLBOXES /JUNCTION BOXES

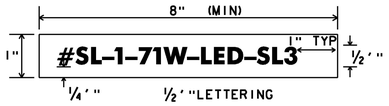
FOR DETAILS SEE VTrans STANDARD SHEET E-173.

GENERAL

THE LOAD ON EACH BRANCH OF A THREE WIRE CIRCUIT SHALL BE AS BALANCED AS POSSIBLE, LOAD TO NEUTRAL.

THE LAST CONCRETE POLE BASE AT THE END OF EACH CIRCUIT SHALL HAVE A CONDUIT SWEEP WITH CAP INSTALLED FOR FUTURE USE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY ELECTRICAL PERMITS.



LEGEND: BLACK OR WHITE (NON-REFL.) - STAMPED PRIOR TO PRINTING/PAINTING.
BACKGROUND: NATURAL ALUMINUM OR FLAT BLACK SURFACE, SAME AS POLE FINISH.

DETAILS FOR TAGS ATTACHED TO SITE LIGHT POLES

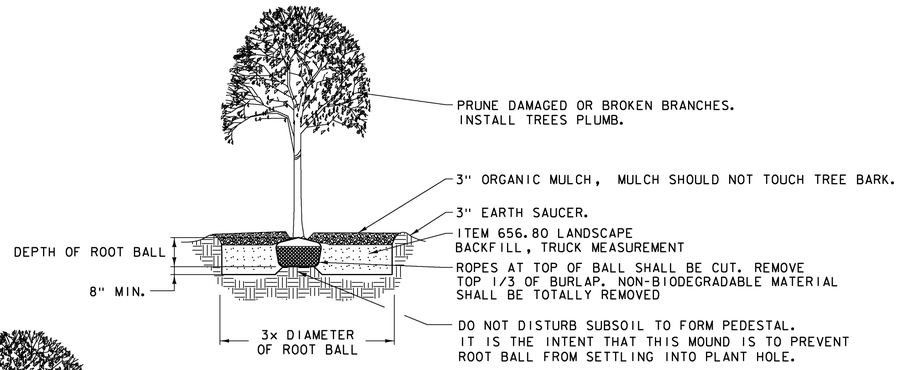
NOT TO SCALE

1. THE TAG SHALL BE MOUNTED ON ALL STREET LIGHT POLES IN SUCH A MANNER AS NOT TO BE EASILY REMOVED, SUCH AS WELDED, RIVETED, OR BOLTED WITH VANDAL PROOF BOLTS.
2. THE LETTERS SHALL BE PUNCHED, STAMPED, ENGRAVED, OR PHOTO-ETCHED. PUNCHING, STAMPING OR ENGRAVING SHALL PENETRATE AT LEAST 1/2 THE BASE MATERIAL THICKNESS.
3. THE BASE MATERIAL FOR THE TAG SHALL BE ALUMINUM WITH A MINIMUM THICKNESS OF 0.100 INCH.
4. THE TAG SHALL BE ATTACHED TO THE POLE ABOVE THE HANDHOLE, 6 INCHES MAXIMUM. IF THE POLE HAS A TRANSFORMER BASE ATTACH TAG TO COVER.
5. TYPE 'A' FIXTURE TAG SHALL READ: SL-#-51W-LED-SL3

   TYPE 'B' FIXTURE TAG SHALL READ: SL-#-102W-LED-5WQ

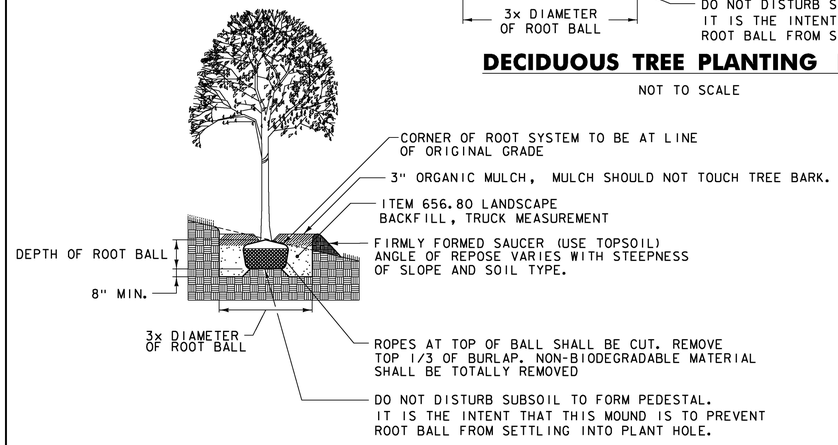
GENERAL NOTES

1. APPLICABLE STANDARDS: AMERICAN NATIONAL STANDARDS FOR TREE CARE OPERATIONS, ANSI A300. AMERICAN STANDARD FOR NURSERY STOCK, ANDSO Z60.1. HORTUS THIRD, THE STAFF OF THE L.H. BAILEY HORTORIUM. ALL STANDARDS SHALL INCLUDE THE LATEST ADDITIONS AND AMENDMENTS AS OF THE DATE OF ADVERTISEMENT FOR BIDS.
2. FERTILIZER: SLOW RELEASE TYPE, OR SUBSTITUTE APPROVED BY THE ENGINEER, APPLIED AS FOLLOWS:
   TREES AND SHRUBS
   MARCH-MAY 10-10-10
   MAY-OCTOBER 6-10-10
   OCTOBER-MARCH 4-12-12
   RATE OF APPLICATION: 1lb./INCH IN CALIPER
3. EXCAVATE SOIL TO 3X WIDER THAN ROOT BALL DIAMETER FOR TREES AND 2X WIDER FOR SHRUBS. SET BALLED AND BURLAPPED (B&B) STOCK ON LAYER OF COMPACTED SOIL MIXTURE, STAND PLUMB AND IN CENTER OF PIT OR TRENCH WITH TOP OF BALL AT THE SAME ELEVATION AS ADJACENT FINISHED LANDSCAPE GRADES. REMOVE WIRE BASKET AND ALL TWINE, REMOVE BURLAP FROM UPPER THIRD OF BALLS: RETAIN ON BOTTOMS. SET CONTAINER GROWN SOCK AS SPECIFIED FOR B&B MATERIAL, EXCEPT CUT CANS ON TWO SIDES WITH AN APPROVED CAN CUTTER.
4. DISH TOP OF BACKFILL TO ALLOW FOR MULCHING. MULCH PITS WITH NOT LESS THAN 3" OF ORGANIC MULCH. MULCH SHOULD NOT TOUCH TREE BARK. SEE SUBSECTION 755.10.
5. ALL PLANTS SHALL BE CAREFULLY AND THOROUGHLY WATERED DURING PLANTING AND AS OFTEN AS NECESSARY THEREAFTER TO PROVIDE THE BEST GROWING CONDITIONS UNTIL ACCEPTANCE OF THE WORK.
6. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING. MAINTAIN TREES, SHRUBS, AND OTHER PLANTS BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS. RESTORE OR REPLACE DAMAGED WRAPPINGS. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE, AT THE EXPENSE OF THE CONTRACTOR.
7. MAINTAIN LAWNS BY WATERING, FERTILIZING, WEEDING, MOWING (2" HEIGHT), TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING, AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS AT THE EXPENSE OF THE CONTRACTOR.
8. SEE TYPICAL SECTIONS SHEET 2 FOR TURF ESTABLISHMENT INFORMATION.



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

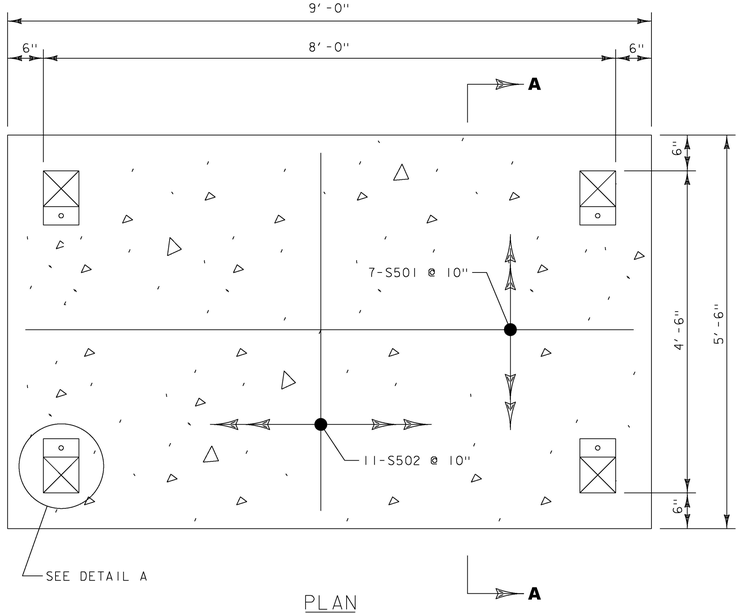


PLANTING ALONG SLOPE

NOT TO SCALE

Stantec

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09K252frm.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
LIGHTING AND LANDSCAPING DETAILS	SHEET 18 OF 33



PLAN

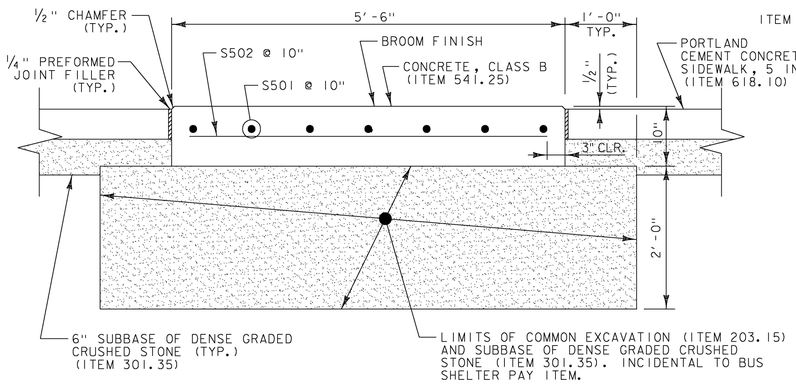
SCALE: 1" = 1'-0"

REINFORCING SCHEDULE

NO. PIECES	SIZE	LENGTH	MARK	TYPE
7	5	8'-6"	S501	STR.
11	5	5'-0"	S502	STR.

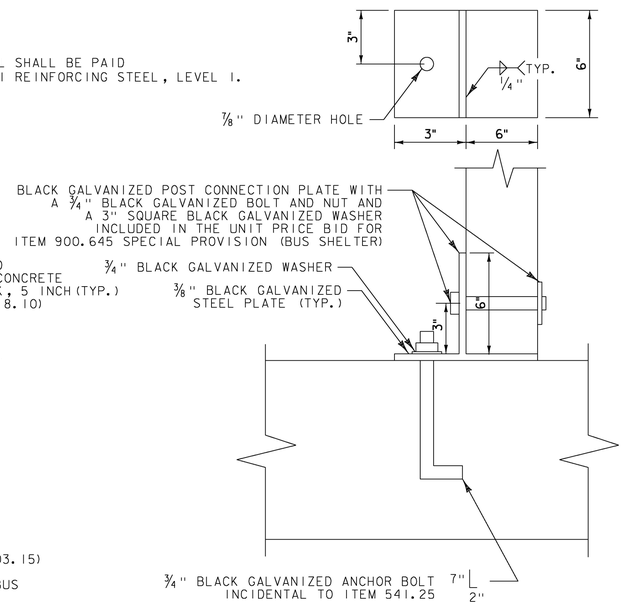
NOTES:

REINFORCING STEEL SHALL BE PAID UNDER ITEM 507.11 REINFORCING STEEL, LEVEL 1.



SECTION A-A

SCALE: 1" = 1'-0"

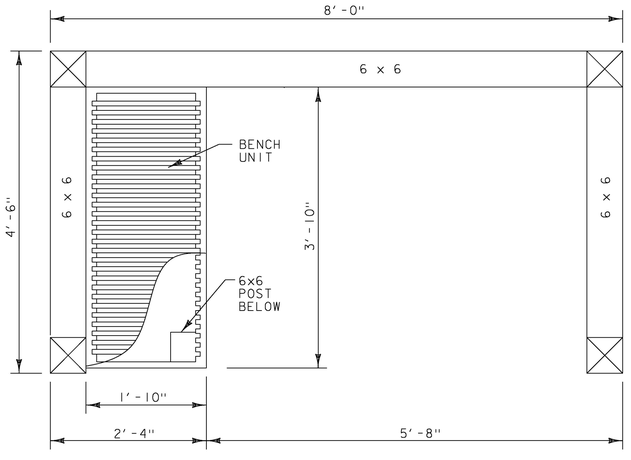


NOTE: DRILL AND EPOXY ANCHORING WILL BE PERMITTED. MINIMUM 3/4" ANCHOR ROD EMBEDMENT INTO CONCRETE SHALL BE 6" AND HAVE A MINIMUM PULL OUT STRENGTH OF 3,000 LBS.

DETAIL A

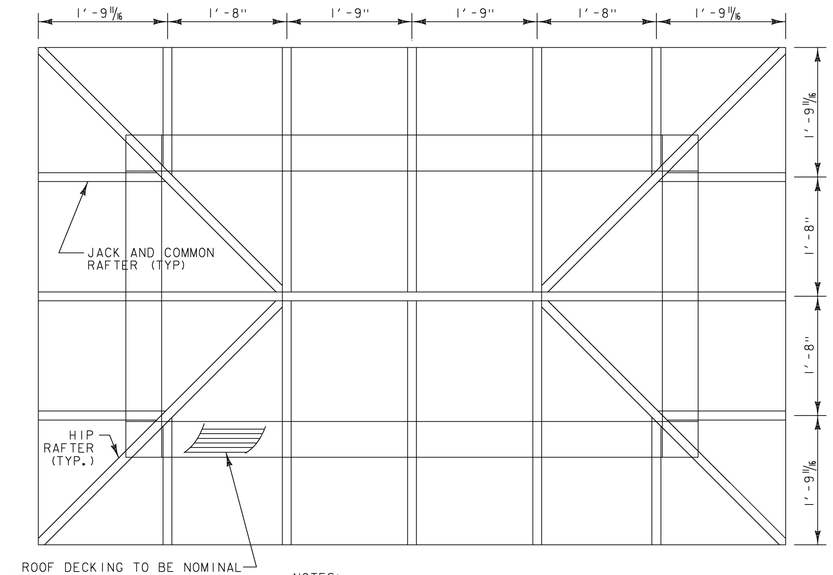
NOT TO SCALE

BUS SHELTER SLAB DETAIL



PLAN VIEW

SCALE: 1" = 1'-0"



NOTES:
1. JACK AND COMMON RAFTERS ARE 2x6.
2. HIP RAFTERS ARE 2x7
3. RIDGE BEAM IS 2x8

ROOF FRAMING

SCALE: 1" = 1'-0"

NOTES:

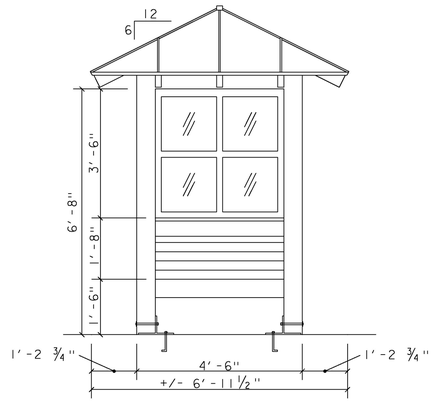
1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION, 2011 STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, DATED 2010, AND ITS LATEST REVISIONS.
2. REINFORCING PLACEMENT TOLERANCES SHALL BE:
   SPACING +/- 1"
   CLEARANCE +/- 1/4"
3. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2" BY 1/2"
4. WATER REPELLENT SILANE (ITEM 514.10) SHALL BE APPLIED TO ALL EXPOSED CONCRETE.
5. ALL MATERIALS AND WORK DETAILED ON THIS SHEET SHALL BE INCLUDED UNDER ITEM 900.645 SPECIAL PROVISION (BUS SHELTER) UNLESS OTHERWISE NOTED.
6. ALL WOODEN PEGS SHALL BE 1" DIAMETER OAK.
7. THE STRUCTURE WAS DESIGNED FOR THE FOLLOWING LOADS:
   GROUND SNOW LOAD = 100 psf
   BASIC WIND SPEED = 90 mph
   CATEGORY I
8. ALL DIMENSIONS ARE NOMINAL. MEMBERS SHALL BE SURFACED ON FOUR SIDES.
9. TIMBER FRAMING SHALL BE APPEARANCE GRADE WHITE OAK (NO. 1). ROOF SHEATHING SHALL BE NO. 1 OR NO. 2 SPF. BENCH FRAMING SHALL BE APPEARANCE GRADE WHITE OAK (NO. 1).
10. SEE BUS SHELTER SPECIAL PROVISION IN CONTRACT DOCUMENTS FOR ADDITIONAL REQUIREMENTS.

Stantec

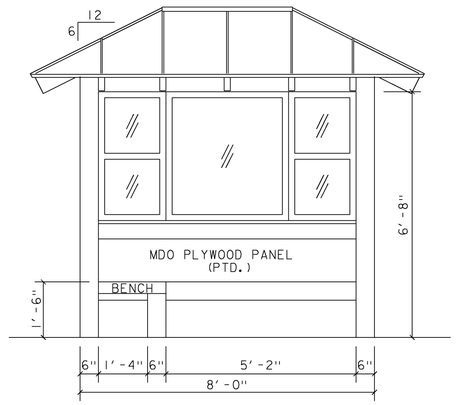
PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09k252shltr_det.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: J. HUNGERFORD
BUS SHELTER DETAILS 1

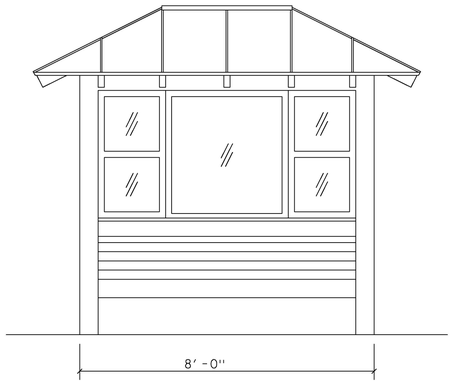
PLOT DATE: 5/22/2014
DRAWN BY: L. BUXTON
CHECKED BY: G. BOGUE



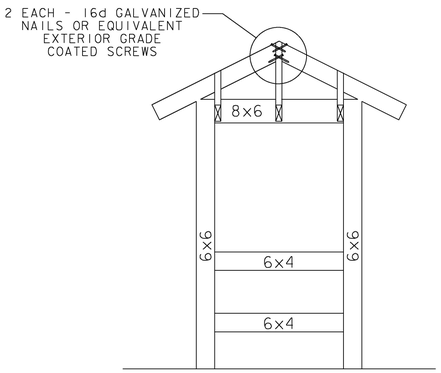
END ELEVATION (TYP.)
SCALE: 1/2" = 1'-0"



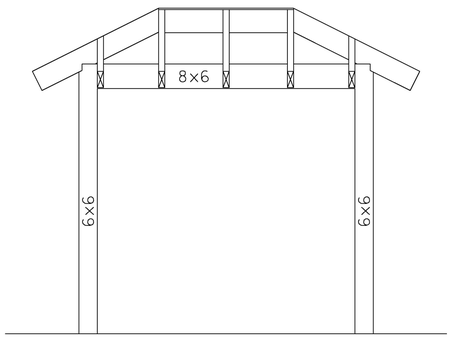
FRONT/INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



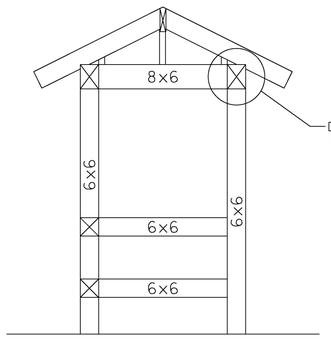
REAR ELEVATION
SCALE: 1/2" = 1'-0"



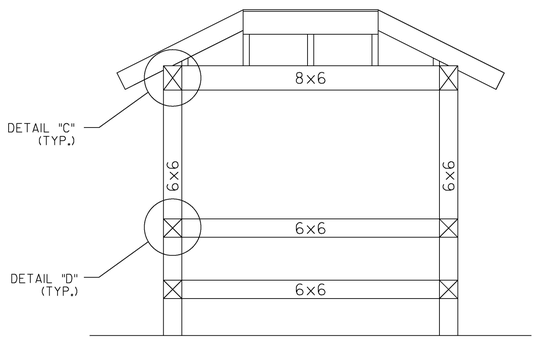
END FRAMING - ELEVATION
SCALE: 1/2" = 1'-0"



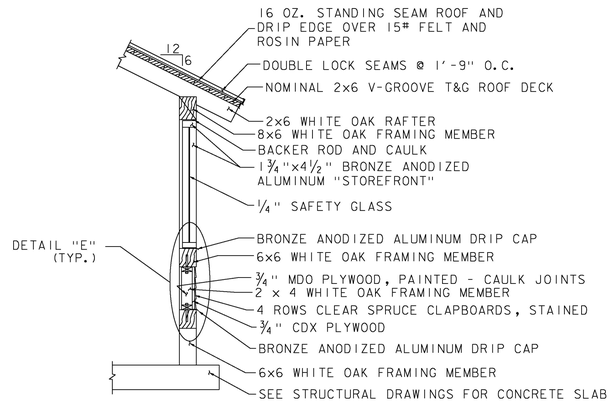
FRONT/REAR FRAMING - ELEVATION
SCALE: 1/2" = 1'-0"



END FRAMING - SECTION
SCALE: 1/2" = 1'-0"

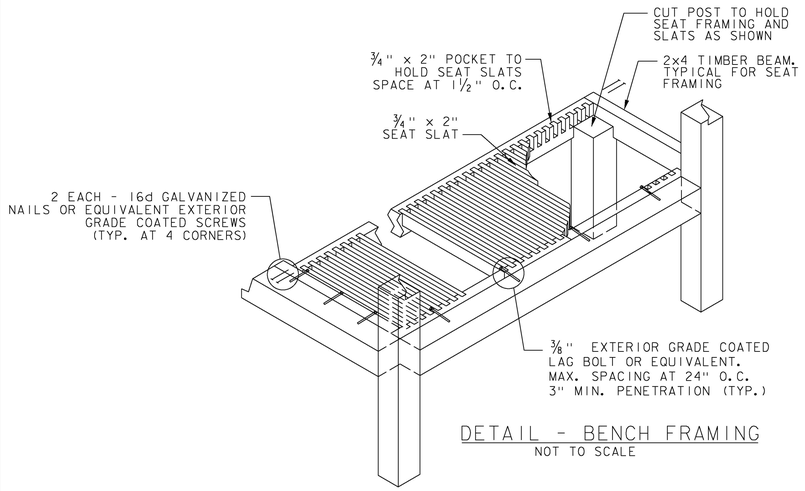


FRONT/REAR FRAMING - SECTION
SCALE: 1/2" = 1'-0"



TYPICAL WALL SECTION
SCALE: 1/2" = 1'-0"

NOTES
1. JACK AND COMMON RAFTERS ARE 2x6.
2. HIP RAFTERS ARE 2x7
3. RIDGE BEAM IS 2x8

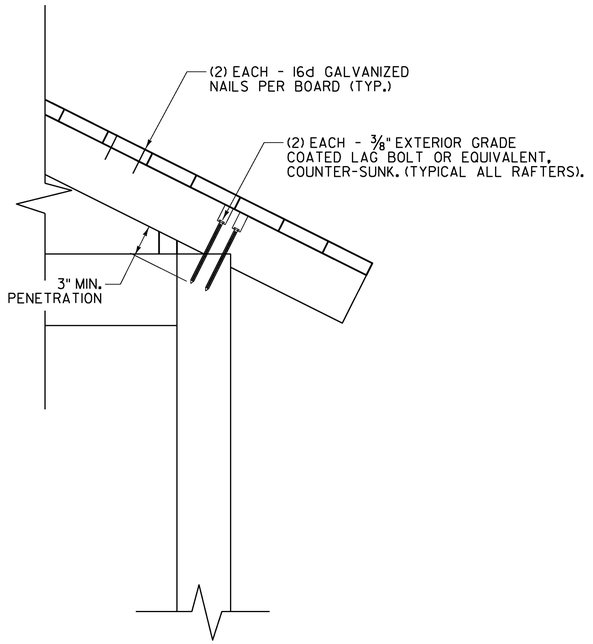


DETAIL - BENCH FRAMING
NOT TO SCALE

NOTE:
FOR DETAILS B & C, SEE BUSH SHELTER DETAILS 3.
FOR DETAILS D & E, SEE BUS SHELTER DETAILS 4.
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.

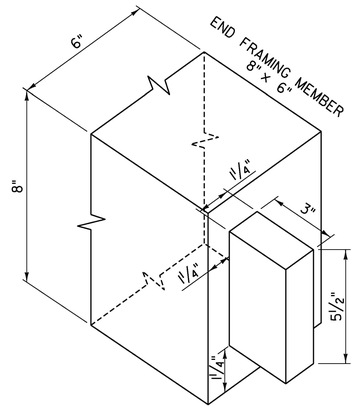
Stantec

PROJECT NAME: BRADFORD	
PROJECT NUMBER: CMG PARK (33)	
FILE NAME: z09k252shltr_det.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: L. BUXTON
DESIGNED BY: J. HUNGERFORD	CHECKED BY: G. BOGUE
BUS SHELTER DETAILS 2	SHEET 20 OF 33

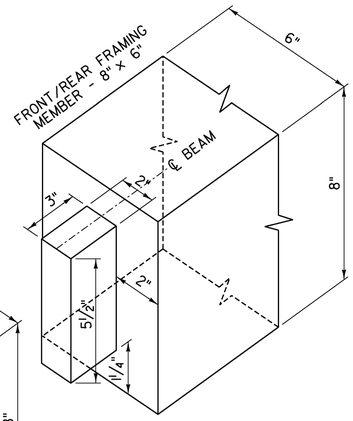


DETAIL "B"

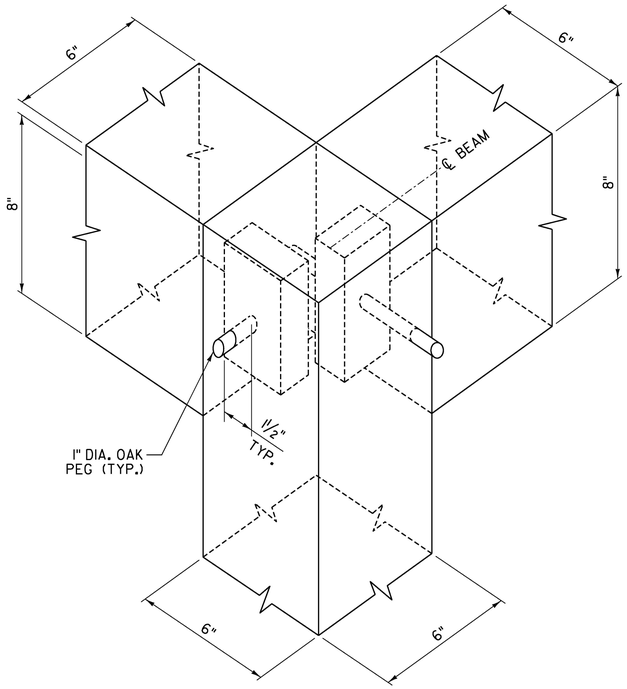
SCALE 1½" = 1'-0"



MORTISE & TENON DETAIL



MORTISE & TENON DETAIL

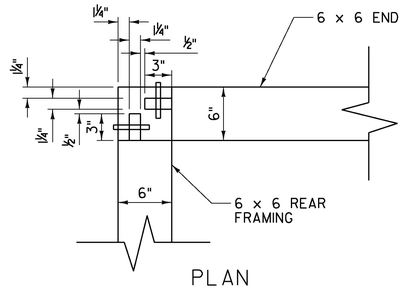


DETAIL "C"

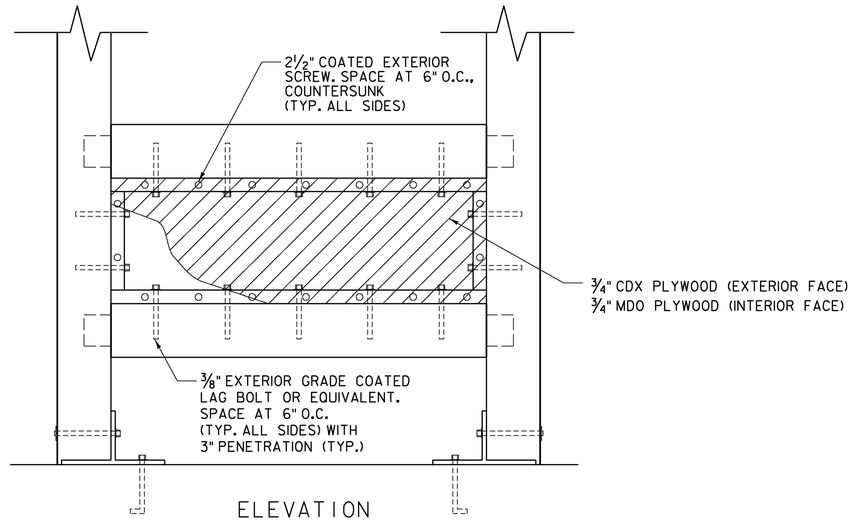
SCALE 1½" = 1'-0"

Stantec

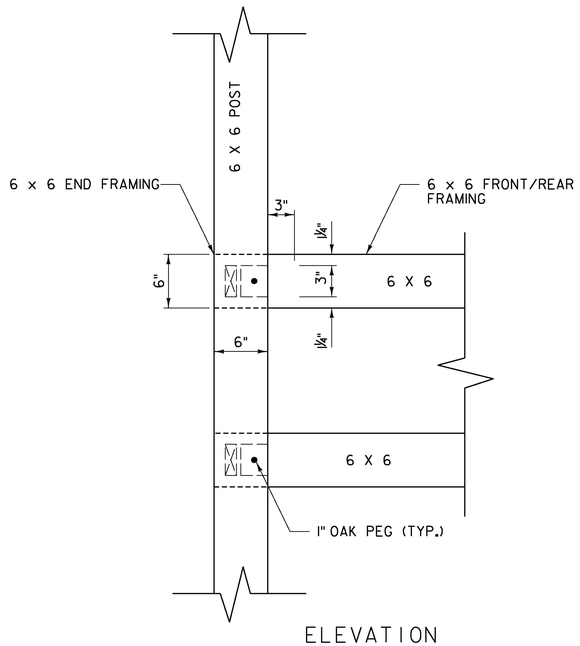
PROJECT NAME: BRADFORD	
PROJECT NUMBER: CMG PARK (33)	
FILE NAME: z09k252shltr_det.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: L. BUXTON
DESIGNED BY: J. HUNGERFORD	CHECKED BY: G. BOGUE
BUS SHELTER DETAILS 3	SHEET 21 OF 33



PLAN



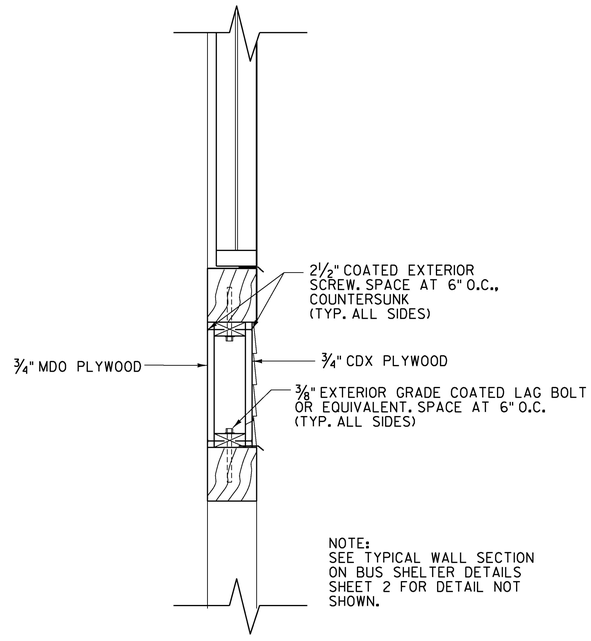
ELEVATION



ELEVATION

DETAIL "D"

SCALE 1½" = 1'-0"



SECTION

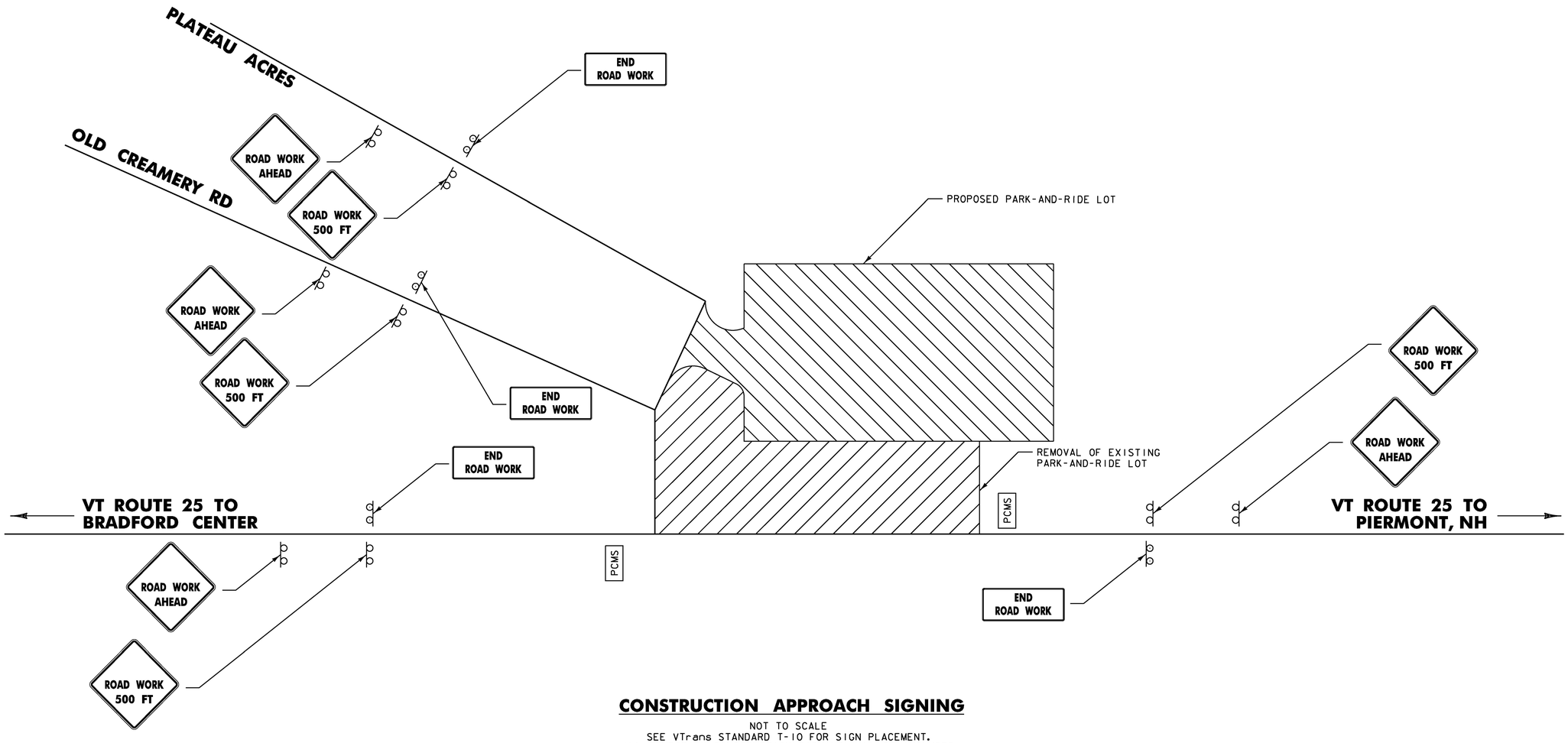
DETAIL "E"

SCALE 1½" = 1'-0"

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.

Stantec

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09k252shltr_det.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: L. BUXTON
DESIGNED BY: J. HUNGERFORD	CHECKED BY: G. BOGUE
BUS SHELTER DETAILS 4	SHEET 22 OF 33



CONSTRUCTION APPROACH SIGNING

NOT TO SCALE
SEE VTrans STANDARD T-10 FOR SIGN PLACEMENT.
ALL TEMPORARY CONSTRUCTION SIGNING WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10.

LEGEND

ERW = END ROAD WORK
RW500 = ROAD WORK 500 FT
RWA = ROAD WORK AHEAD

PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

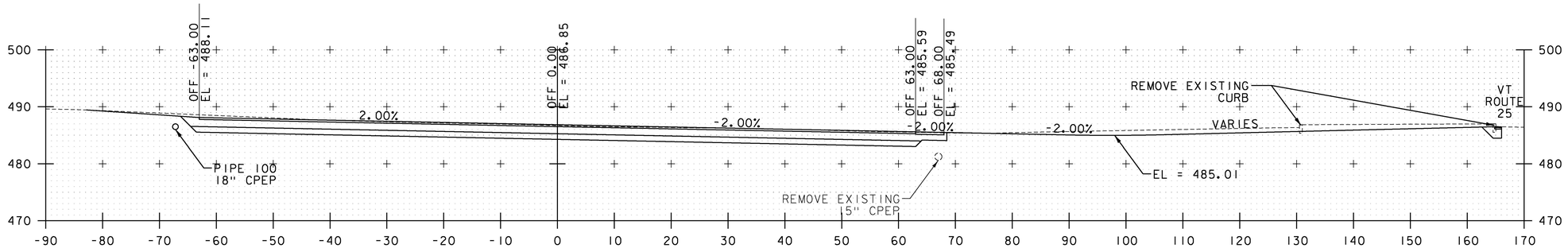
LOCATION	ERW	RW500	RWA	PCMS
VT ROUTE 25 EB	1	1	1	1
VT ROUTE 25 WB	1	1	1	1
OLD CREAMERY RD	1	1	1	-
PLATEAU ACRES	1	1	1	-
TOTALS	4	4	4	2

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

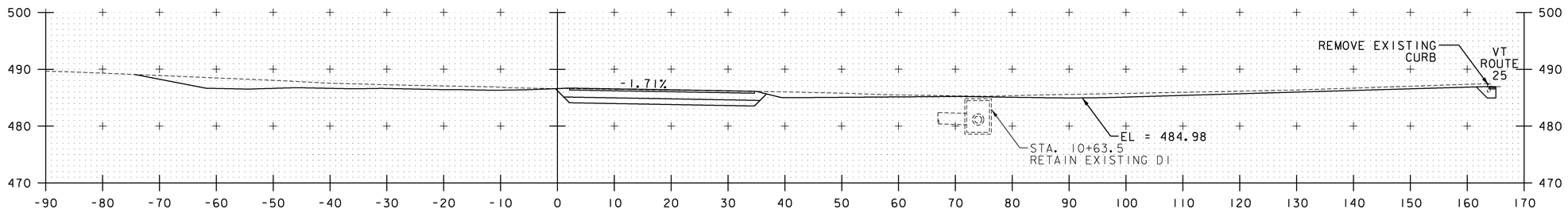
FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
CONSTRUCTION APPROACH SIGNING

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 23 OF 33

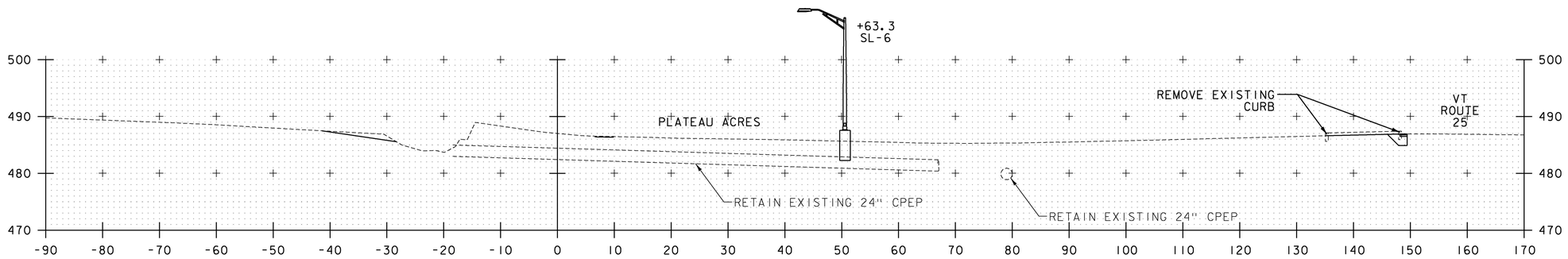


10+81

BEGIN NEW PARK & RIDE LOT



10+75



10+50

STA. 10+50 TO STA. 10+81

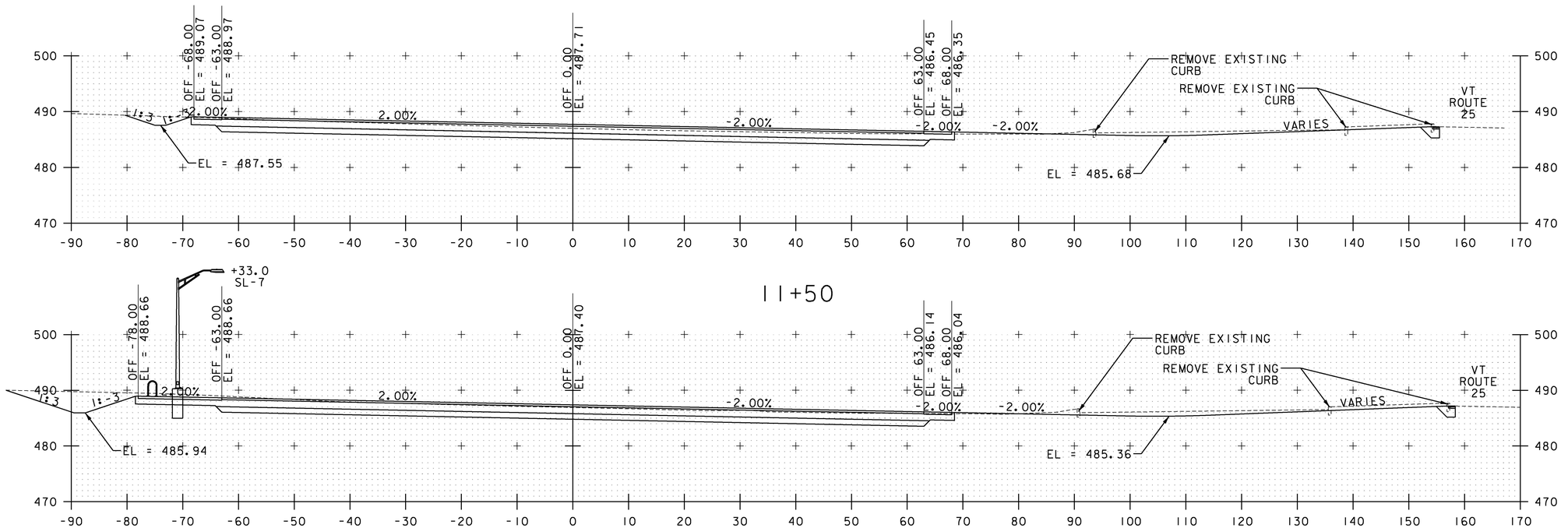
PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09k252xs.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
CROSS SECTIONS SHEET 1

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 24 OF 33

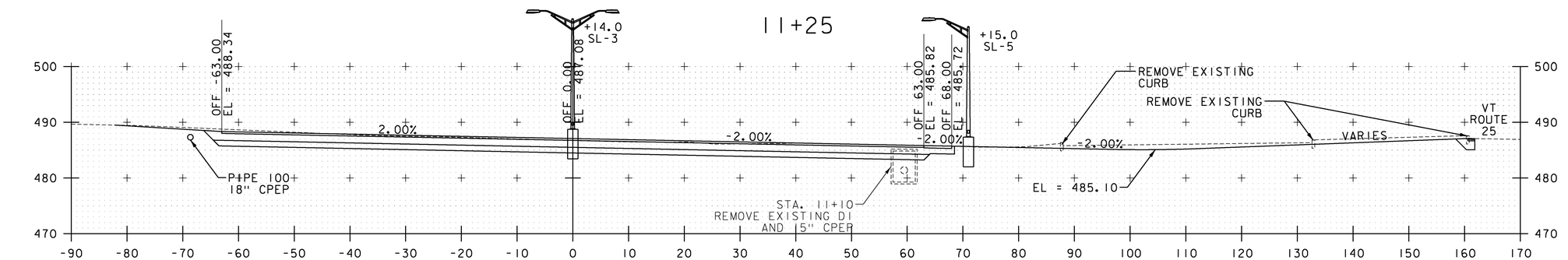
0 10 20
SCALE
1"=10' @ FULL SIZE

Stantec



11+50

11+25



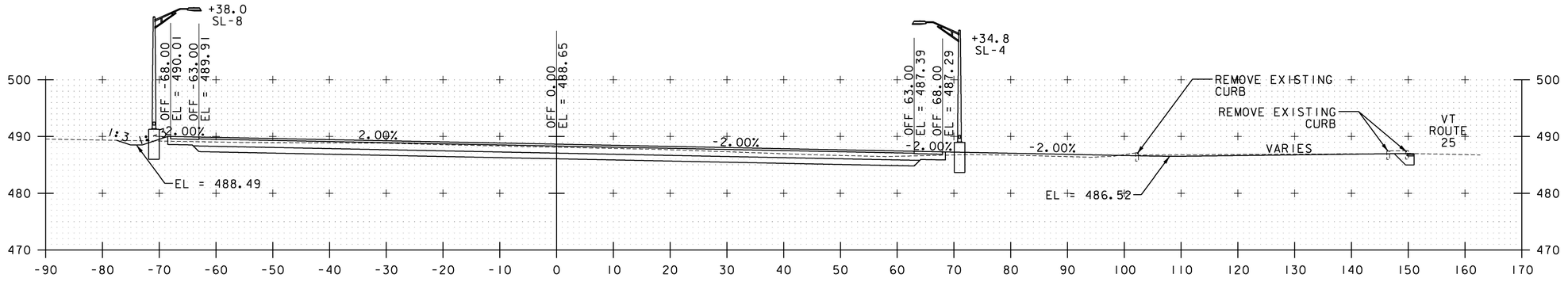
11+00

STA. 11+00 TO STA. 11+50

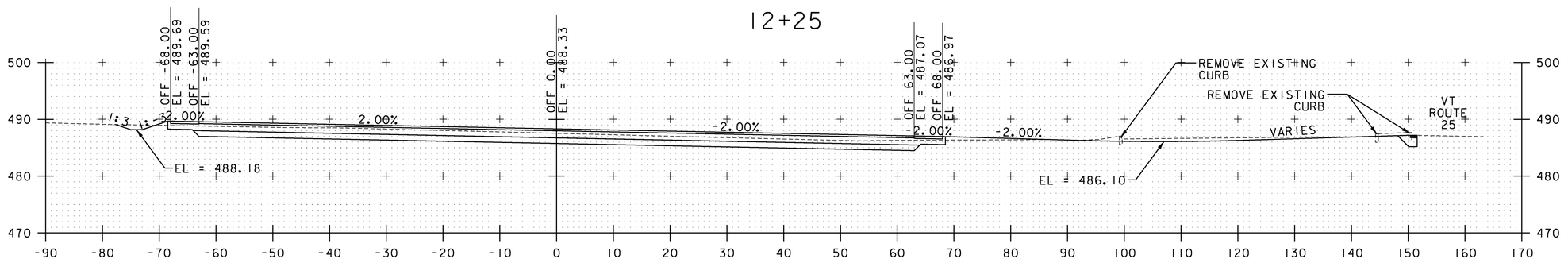
0 10 20
SCALE
1"=10' @ FULL SIZE

Stantec

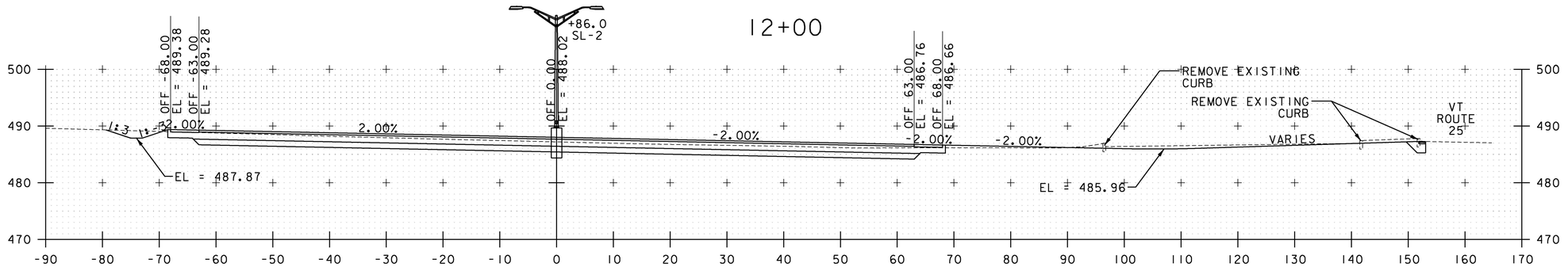
PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09k252xs.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
CROSS SECTIONS SHEET 2	SHEET 25 OF 33



12+25



12+00



11+75

STA. 11+75 TO STA. 12+25

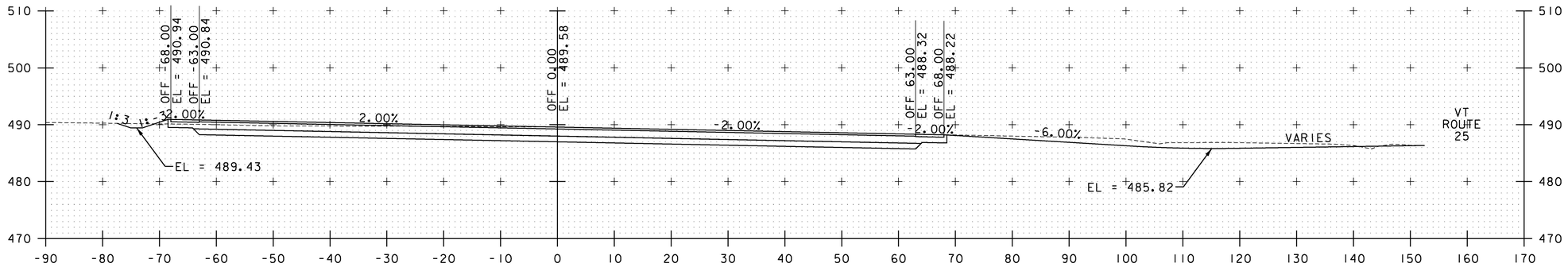
0 10 20
SCALE
1"=10' @ FULL SIZE

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

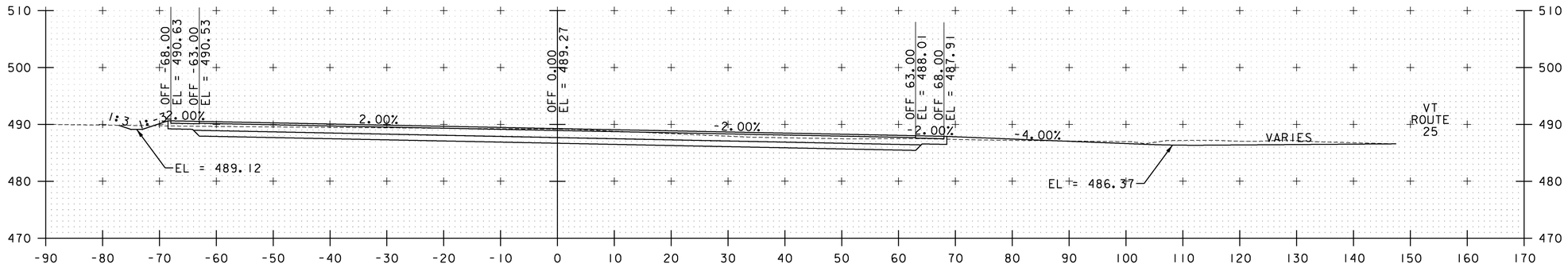
FILE NAME: z09k252xs.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
CROSS SECTIONS SHEET 3

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY
SHEET 26 OF 33

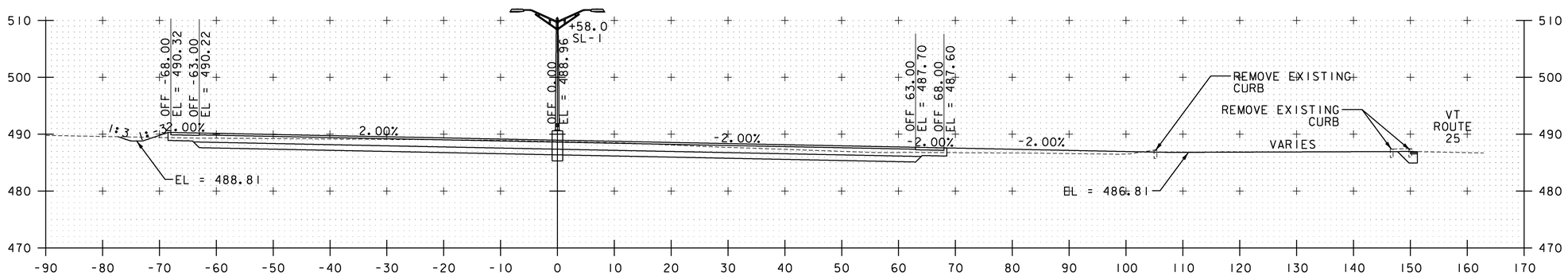


13+00

END NEW PARK & RIDE LOT



12+75



12+50

STA. 12+50 TO STA. 13+00

0 10 20

SCALE
1"=10' @ FULL SIZE

Stantec

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)

FILE NAME: z09k252xs.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
CROSS SECTIONS SHEET 4	SHEET 27 OF 33

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT IS LOCATED ON VT ROUTE 25 IN THE TOWN OF BRADFORD, AT THE INTERSECTION OF VT ROUTE 25 AND OLD CREAMERY ROAD TH-27. WORK TO BE PERFORMED ON THIS PROJECT INCLUDES THE RECONSTRUCTION OF THE EXISTING PARK AND RIDE FACILITY INTO A NEW 83 SPACE PARK-AND-RIDE LOT, SUBBASE, PAVEMENT, PAVEMENT MARKINGS, LIGHTING, LANDSCAPING, BUS SHELTER AND MISCELLANEOUS APPURTENANCES.

NOTE: AREA OF DISTURBANCE SHALL INCLUDE LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, INCLUDING ANY WASTE, STAGING AND BORROW AREAS WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 1.4 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL BE COMPLETED IN ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

VT ROUTE 25 BORDERS THE PROJECT TO THE SOUTH AND RANGES IN GRADE FROM 2.0% TO 8.0%. IMMEDIATELY TO THE SOUTH OF THE PROJECT IS A GRAVEL DRIVE TO AN EXISTING RESIDENCE. THERE IS EXISTING UNDERGROUND CONDUIT TO AN ELECTRIC METER WHICH WILL BE THE POWER SOURCE FOR THE PROJECT LIGHTING.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

WAITS RIVER IS LOCATED APPROXIMATELY 600' NORTHWEST OF THE SITE, FLOWS NORTH TO SOUTH AND SERVES AS A TRIBUTARY TO THE CONNECTICUT RIVER. THE CONNECTICUT RIVER IS LOCATED APPROXIMATELY ¾ OF A MILE EAST OF THE SITE.

THE SITE SLOPES TOWARD VT ROUTE 25 AT GRADE OF APPROXIMATELY 2%. VEGETATION CONSISTS OF GRASS AND SCRUB BRUSH. THE SITE RECEIVES MINIMAL RUNOFF FROM OFFSITE AREAS. DRAINAGE ALONG PLATEAU ACRES FLOWS INTO THE 24" CPEP AND THEN INTO THE SITE DRAINAGE INLET CULVERT. STORM WATER RUNOFF FROM THE PROJECT WILL FLOW IN A SOUTHWESTERLY DIRECTION THROUGH A COMBINATION OF OPEN SWALE AND CLOSED DRAINAGE AND ACROSS A NATURALLY VEGETATED AREA ALONG OLD CREAMERY ROAD TO WAITS RIVER. TWO EXISTING CATCH BASINS AT THE SOUTHWEST END OF THE SITE DRAIN UNDER OLD CREAMERY ROAD AND DISCHARGE TO THE WAITS RIVER.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS MAINLY OF BRUSH AND GRASS, WITH SOME AREAS OF LAWN BORDERING ROUTE 25 AND ALONG BOTH OLD CREAMERY ROAD AND PLATEAU ACRES.

DISTURBED VEGETATION OUTSIDE OF THE PROPOSED PAVED PARKING AND SIDEWALK AREAS WILL BE REESTABLISHED WITH LANDSCAPING AND STANDARD SEED AND MULCH/EROSION MATTING PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF ORANGE, VERMONT. SOILS ON THE PROJECT SITE ARE AS FOLLOWS:

WINDSOR LOAMY FINE SAND, 25% TO 50% SLOPES, "K FACTOR" = 0.17. THE SOIL IS CONSIDERED TO HAVE LOW EROSION POTENTIAL.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING: 0.0-0.23 = LOW EROSION POTENTIAL; 0.24-0.36 = MODERATE EROSION POTENTIAL: 0.37 AND HIGHER = HIGH EROSION POTENTIAL.

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: NO
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: NO
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLNAD, ETC).BARRIER FENCE IS NOT ANTICIPATED TO BE NEEDED AS THERE ARE NO WATER RESOURCES OR WETLANDS WITHIN 100' OF PROJECT DISTURBANCE.

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTOR'S PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. STONE AND BLOCK INLET PROTECTION WILL BE INSTALLED ON ALL EXISTING INLETS IN UNPAVED AREAS. FILTER FIBER INLET PROTECTION WILL BE INSTALLED FOR INLETS IN PAVED AREAS. PIPE INLET PROTECTION WILL BE INSTALLED FOR THE OPEN PIPE INLETS.

1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT IS ADJACENT TO VT ROUTE 25, THEREFORE, IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN, AT A MINIMUM.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS. THE PROJECT DOESN'T CURRENTLY REQUIRE AN OPERATIONAL STORMWATER PERMIT.

SPECIFIC PERMANENT CONTROL MEASURES OF THE PROJECT INCLUDE RE-VEGETATION.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

IT IS NOT ANTICIPATED THAT THIS PROJECT WILL EXTEND INTO THE WINTER CONSTRUCTION SEASON.

1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

DE-WATERING ACTIVITIES ARE NOT ANTICIPATED AS PART OF THIS PROJECT. IN THE EVENT DE-WATERING IS NECESSARY, THE CONTRACTOR SHALL DO SO AT NO ADDITIONAL COST TO THE PROJECT.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

1.5.1 CONSTRUCTION SEQUENCE

BY CONTRACTOR

1.5.2 OFF-SITE ACTIVITIES

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

Stantec

PROJECT NAME: BRADFORD
PROJECT NUMBER: CMG PARK (33)

FILE NAME: z09K252frm.dgn
PROJECT LEADER: M. FOISY
DESIGNED BY: I. MAYNARD
EPSC NARRATIVE

PLOT DATE: 5/22/2014
DRAWN BY: P. ARMATA
CHECKED BY: G. SANTY

GEOTEXTILE FOR SILT FENCE
STA. 10+59, RT. - STA. 11+21, RT.
STA. 10+91, RT. - STA. 11+16, RT.

PROJECT DEMARCATION FENCE
STA. 10+29, LT - 13+04, RT.

TEMPORARY STONE CHECK DAM, TYPE I
STA. 10+72, LT - STA. 13+03, LT.

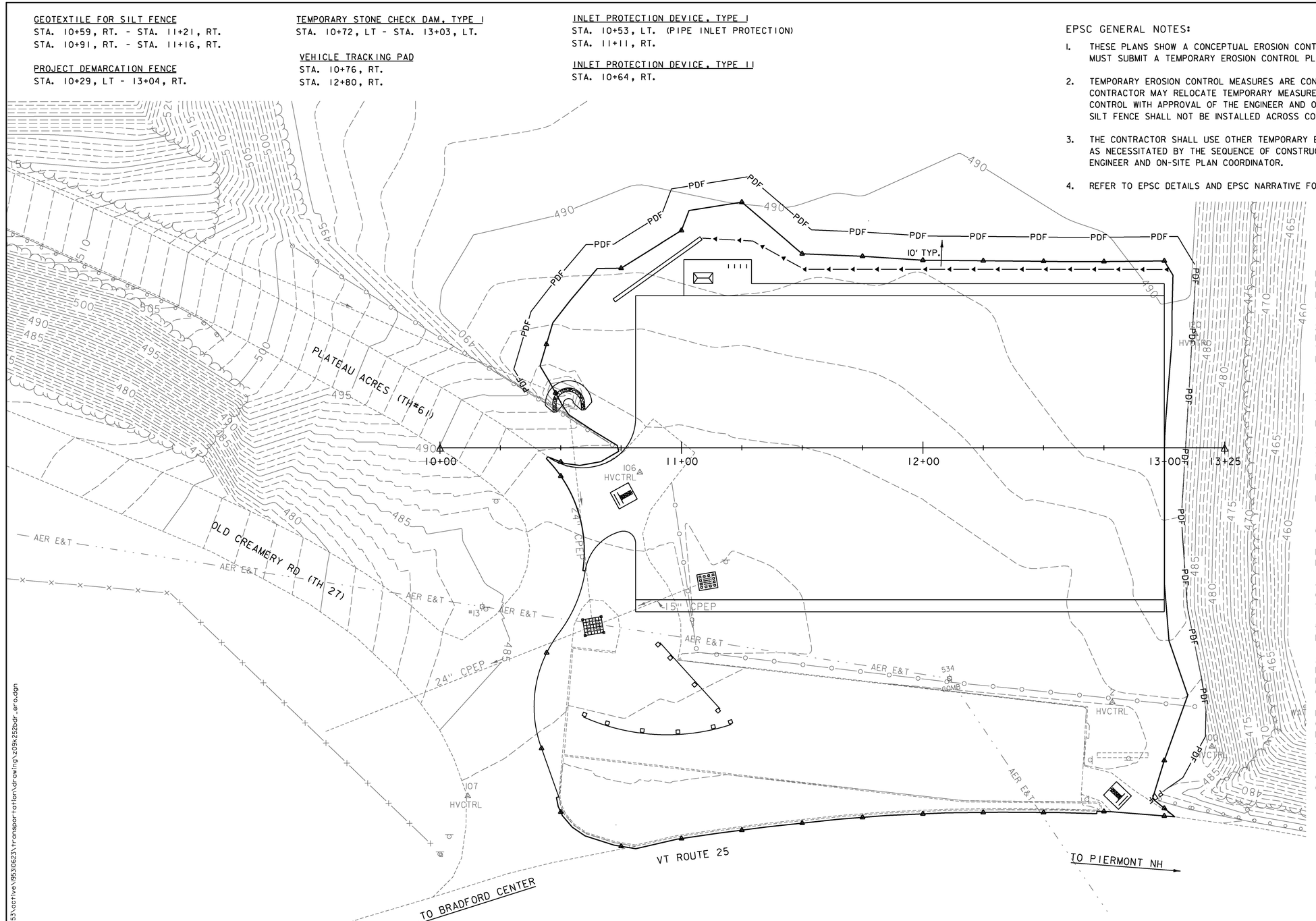
VEHICLE TRACKING PAD
STA. 10+76, RT.
STA. 12+80, RT.

INLET PROTECTION DEVICE, TYPE I
STA. 10+53, LT. (PIPE INLET PROTECTION)
STA. 11+11, RT.

INLET PROTECTION DEVICE, TYPE II
STA. 10+64, RT.

EPSC GENERAL NOTES:

1. THESE PLANS SHOW A CONCEPTUAL EROSION CONTROL PLAN, THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION CONTROL PLAN FOR ACCEPTANCE.
2. TEMPORARY EROSION CONTROL MEASURES ARE CONCEPTUALLY SHOWN. THE CONTRACTOR MAY RELOCATE TEMPORARY MEASURES TO IMPROVE EROSION CONTROL WITH APPROVAL OF THE ENGINEER AND ON-SITE PLAN COORDINATOR. SILT FENCE SHALL NOT BE INSTALLED ACROSS CONTOURS.
3. THE CONTRACTOR SHALL USE OTHER TEMPORARY EROSION CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION OR AS DIRECTED BY THE ENGINEER AND ON-SITE PLAN COORDINATOR.
4. REFER TO EPSC DETAILS AND EPSC NARRATIVE FOR ADDITIONAL REQUIREMENTS.



GENERAL CONSTRUCTION SEQUENCE

1. DEMARCATE WORK ZONE WITH PROJECT DEMARCATION FENCE (PDF) AS SHOWN ON THE PLANS. FENCE INSTALLED NO MORE THAN 10' BEYOND CONSTRUCTION LIMITS UNLESS APPROVED BY THE ENGINEER.

2. CLEAR AND GRUB THE SITE. DO NOT REMOVE STUMPS, EXCESS SOILS, AND OTHER WASTE MATERIALS UNTIL TEMPORARY EPSC MEASURES HAVE BEEN INSTALLED.

3. INSTALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES, AS SHOWN, AS REQUIRED, OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR, IN THE FOLLOWING ORDER:

A. STABILIZED CONSTRUCTION ENTRANCE VEHICLES ARE REQUIRED TO DRIVE OVER THE 50' SCE BEFORE EXITING THE CONSTRUCTION LIMITS.

B. INLET PROTECTION ON EXISTING DROP INLETS AND CATCH BASINS.

C. STONE CHECK DAMS (SEE EPSC DETAILS).

D. SILT FENCE AND EROSION MATTING (SEE EPSC DETAILS).

4. DISPOSE OF STUMPS, EXCESS SOILS AND OTHER WASTE MATERIAL IN ACCORDANCE WITH SUBSECTION 105.25.

5. COMPLETE CONSTRUCTION OF NEW PARK-AND-RIDE LOT.

A. INSPECT AND MAINTAIN EROSION PREVENTION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

B. DISPOSE OF COLLECTED SEDIMENT AND OTHER POLLUTANTS IN A MANNER APPROVED BY THE ENGINEER THAT WILL NOT RESULT IN SEDIMENTS AND POLLUTANTS ENTERING WATERS OF THE STATE.

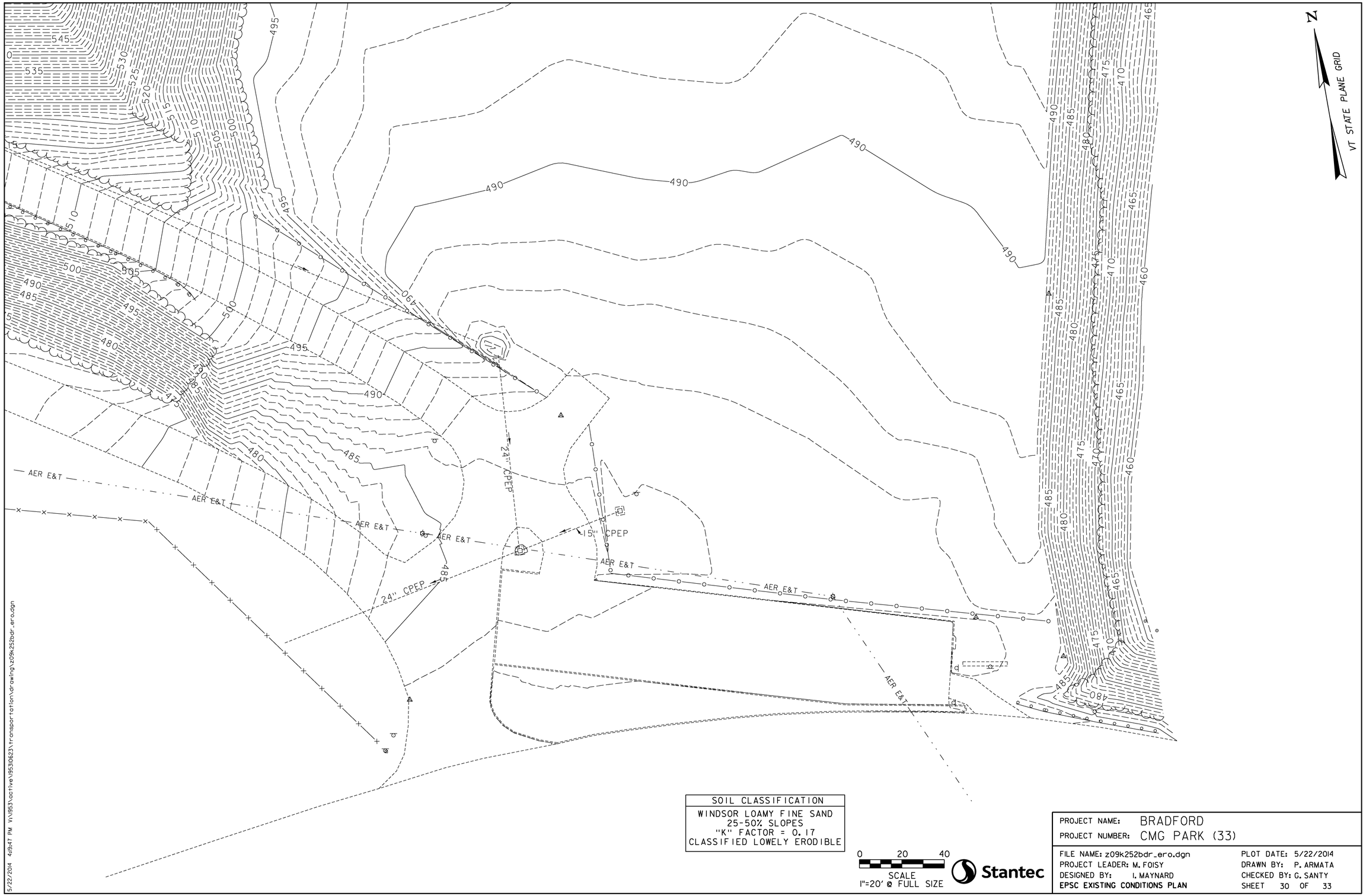
6. PERMANENTLY STABILIZE ALL FINISHED GRADES AS EARTHWORK IS COMPLETED.

0 20 40
SCALE
1"=20' @ FULL SIZE

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PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09k252bdr_ero.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
EPSC CONSTRUCTION SITE PLAN	SHEET 29 OF 33

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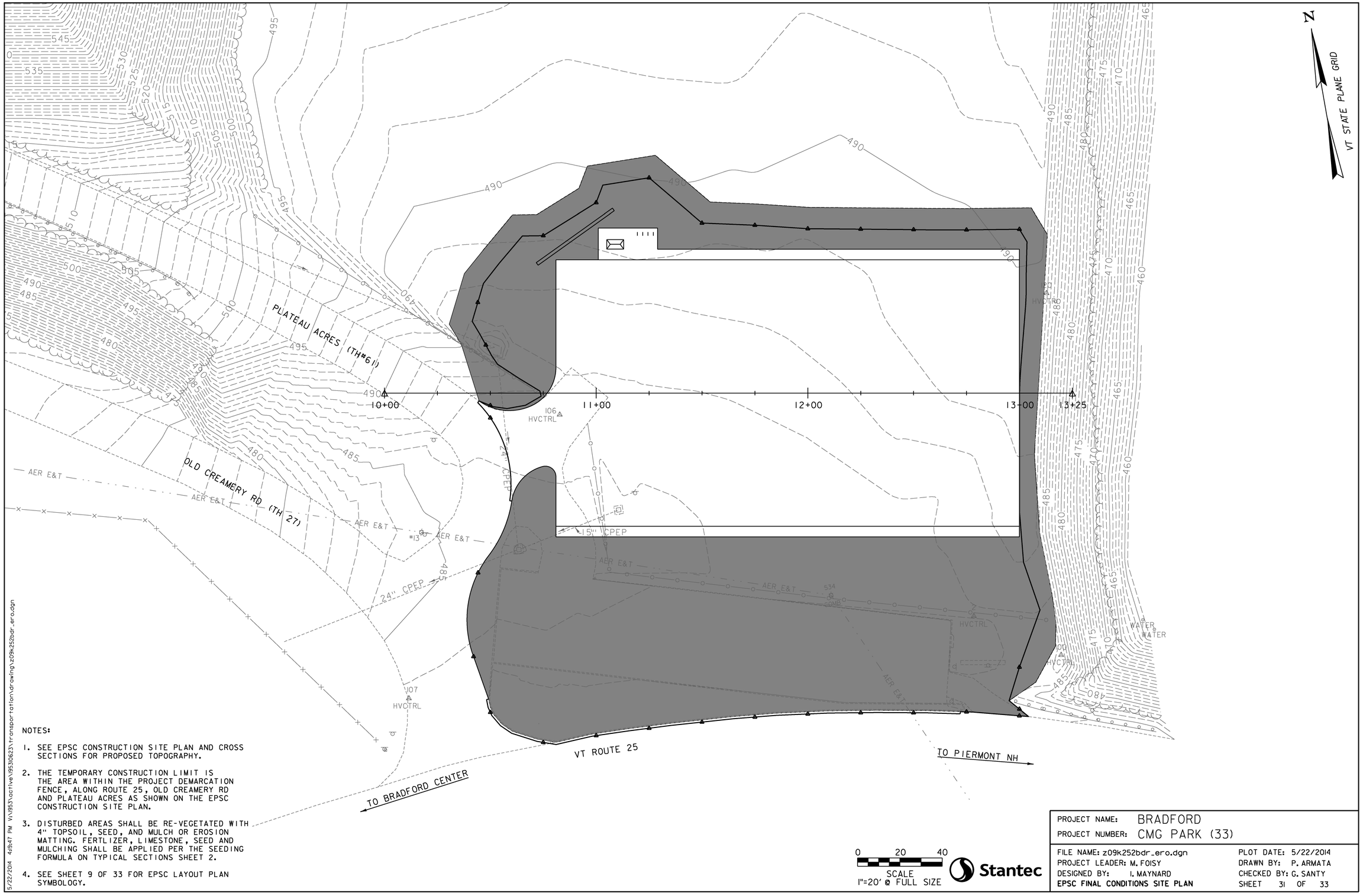
SOIL CLASSIFICATION
WINDSOR LOAMY FINE SAND 25-50% SLOPES "K" FACTOR = 0.17 CLASSIFIED LOWELY ERODIBLE

0 20 40
SCALE
1"=20' @ FULL SIZE

Stantec

PROJECT NAME: BRADFORD	
PROJECT NUMBER: CMG PARK (33)	
FILE NAME: z09k252bdr_ero.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
EPSC EXISTING CONDITIONS PLAN	SHEET 30 OF 33

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NOTES:

1. SEE EPSC CONSTRUCTION SITE PLAN AND CROSS SECTIONS FOR PROPOSED TOPOGRAPHY.
2. THE TEMPORARY CONSTRUCTION LIMIT IS THE AREA WITHIN THE PROJECT DEMARCATION FENCE, ALONG ROUTE 25, OLD CREAMERY RD AND PLATEAU ACRES AS SHOWN ON THE EPSC CONSTRUCTION SITE PLAN.
3. DISTURBED AREAS SHALL BE RE-VEGETATED WITH 4" TOPSOIL, SEED, AND MULCH OR EROSION MATTING. FERTLIZER, LIMESTONE, SEED AND MULCHING SHALL BE APPLIED PER THE SEEDING FORMULA ON TYPICAL SECTIONS SHEET 2.
4. SEE SHEET 9 OF 33 FOR EPSC LAYOUT PLAN SYMBOLOGY.

0 20 40
SCALE
1"=20' @ FULL SIZE

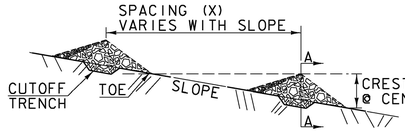
Stantec

PROJECT NAME: BRADFORD	
PROJECT NUMBER: CMG PARK (33)	
FILE NAME: z09k252bdr_ero.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER: M. FOISY	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: G. SANTY
EPSC FINAL CONDITIONS SITE PLAN	SHEET 31 OF 33

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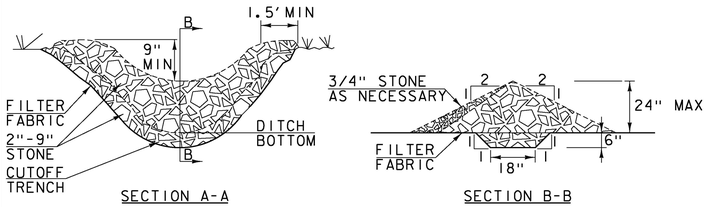
SYMBOL

NOT TO SCALE



PROFILE

$$X = \frac{H\,(ft)}{SLOPE\,(ft/ft)}$$



SECTION A-A

SECTION B-B

CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CHECK DAM

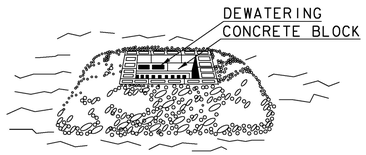
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY STONE CHECK DAM, TYPE I (PAY ITEM 653.25)

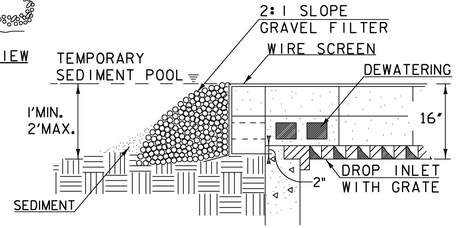
REVISIONS	
MARCH 21, 2008	WHF
JANUARY 8, 2009	WHF

SYMBOL

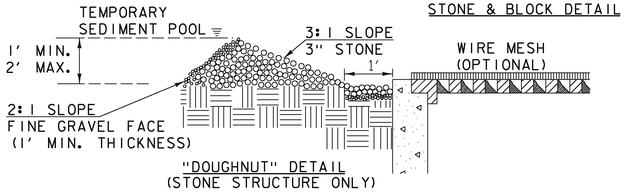
NOT TO SCALE



STONE & BLOCK PLAN VIEW



STONE & BLOCK DETAIL



"DOUGHNUT" DETAIL
(STONE STRUCTURE ONLY)

CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2" MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2"- 3/4" IN DIAMETER PLACED 2" BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1' THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3" STONE AS SHOWN ON THE DRAWINGS.
5. MAXIMUM DRAINAGE AREA 1 ACRE

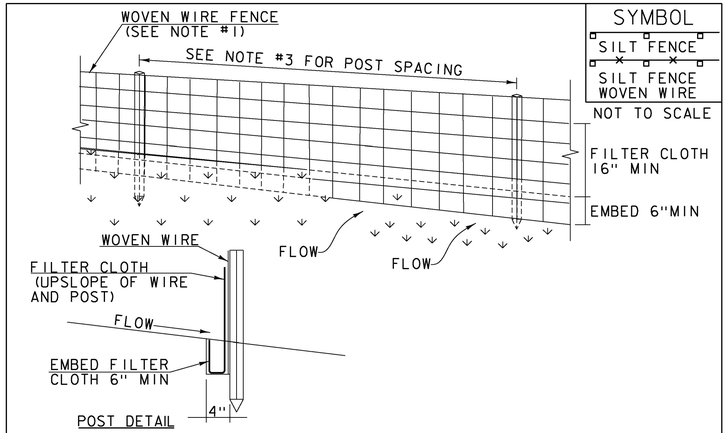
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STONE & BLOCK DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF



POST DETAIL

SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

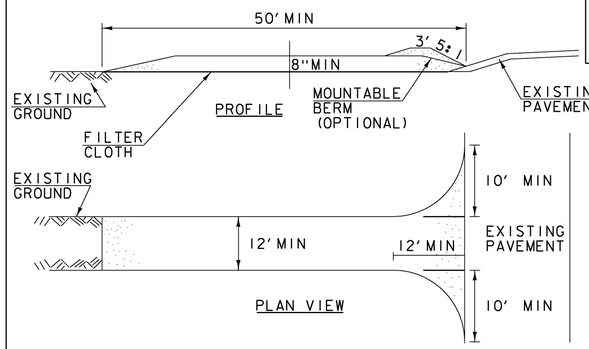
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51)

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF

Stantec

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09K252frm.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER:	DRAWN BY:
DESIGNED BY:	CHECKED BY:
EPSC DETAILS 1	SHEET 32 OF 33



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

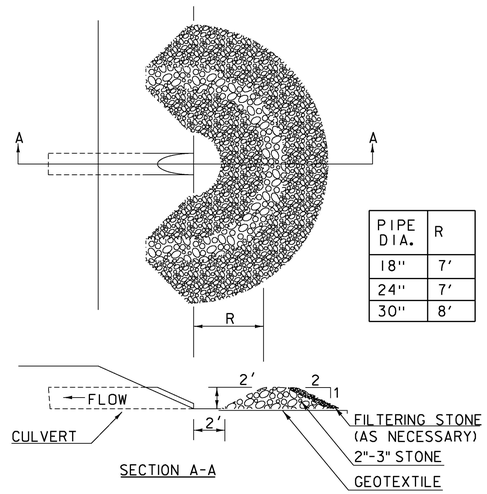
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF



PIPE DIA.	R
18"	7'
24"	7'
30"	8'

SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. USE 2" TO 3" STONE. FILTERING STONE SHALL BE 3/4".
2. PLACE STONE OVER GEOTEXTILE.
3. ONCE THE AREAS UPSTREAM FROM THE CHECK DAM ARE STABILIZED WITH VEGETATION, THE SEDIMENT TRAPPED BEHIND THE DAM SHALL BE DISPOSED OF IN AN APPROVED WASTE AREA.
4. THE CHECK DAM(S) SHALL BE FLATTENED AND GRADED IN A MANNER WHICH PROTECTS THE AREA FROM EROSION AND CHANNEL BLOCKAGE . (GEOTEXTILE MUST BE REMOVED).
5. THE GEOTEXTILE MUST BE DISPOSED OF APPROPRIATELY.
6. THE AREA CONTRIBUTING TO THE CHECK DAM SHALL NOT EXCEED 4 ACRES.

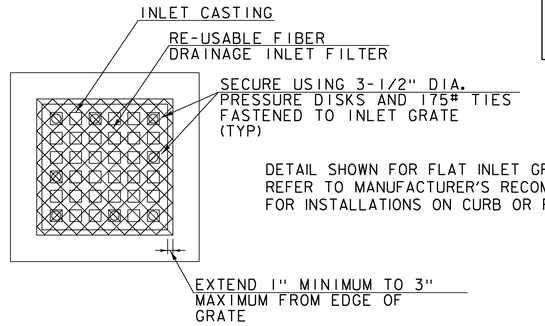
ADAPTED FROM DETAILS PROVIDED BY: ILLINOIS USDA-NRCS
ORIGINALLY DEVELOPED BY USDA-NRCS

PIPE INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. FILTERS SHALL RETAIN ALL CONSTRUCTION DEBRIS AND SHALL RETAIN OR OTHERWISE CONTROL MOST OF THE SEDIMENT PRODUCED BY CONSTRUCTION OPERATIONS.
2. IF CLOGGING OCCURS, INLETS SHALL BE ABLE TO BE EASILY UNCLOGGED BY BROOMING THE SIDES AND TOP OF THE FILTER.
3. INSTALLED FILTERS SHALL BE RESISTANT TO TRAFFIC DAMAGE, INCLUDING TRAFFIC BY STREET CLEANING MACHINES.
4. FILTER UNITS SHALL BE BIODEGRADABLE AND MAY OFTEN BE RE-USED.
5. INSTALL FILTER UNIT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
6. MINIMUM NUMBER OF ANCHORS PER FILTER UNIT: 7 FOR CURB INLETS, 8 FOR FLAT GRATES.
7. INSPECT ALL INSTALLED FILTER UNITS AFTER EVERY RAIN.
8. INSPECT ALL INSTALLED FILTER UNITS PRIOR TO INITIATING CONSTRUCTION ACTIVITIES FOR THE DAY IF RAIN PERSISTS OVERNIGHT.
9. IF, UPON VISUAL INSPECTION, 50% OR MORE OF FILTER FABRIC SURFACE AREA IS INUNDATED WITH SEDIMENT OR FILTER FABRIC IS CLOGGED, CONTRACTOR SHALL BROOM COLLECTED MATERIAL OFF FILTER UNIT SURFACES AND AWAY FROM EDGES.
10. REMOVE SEDIMENT AND DEBRIS COLLECTED AROUND FILTER UNITS. DISPOSE OF COLLECTED SEDIMENT AND DEBRIS AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

INLET PROTECTION DEVICE, FILTER FIBER

NOTES:
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR PAY ITEM 653.41 INLET PROTECTION DEVICE, TYPE II.

Stantec

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME: z09K252frm.dgn	PLOT DATE: 5/22/2014
PROJECT LEADER:	DRAWN BY:
DESIGNED BY:	CHECKED BY:
EPSC DETAILS 2	SHEET 33 OF 33