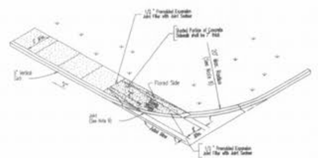
JAN. 28, 2005 -- CITY COMMENTS
MARCH 14, 2005 -- CITY COMMENTS
JULY 26, 2005 -- ADD PIPE BORING DETAIL

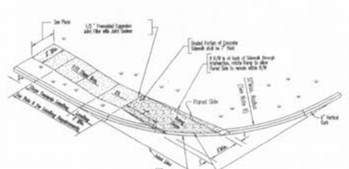
CONSTRUCTION DETAILS

THE ENCLAVE AT DEER CREEK

02-11841 NOVEMBER, 2004

RECEIVED
JUL 28 2005
BUILDING DEPT.



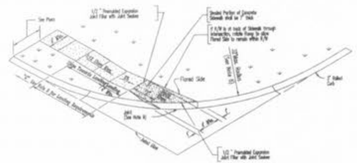


GENERAL NOTES

1. Do not scale drawing. Follow dimensions.
2. Sidewalks and sidewalk curb ramps shall be constructed in accordance with these details and the current approved "Americans with Disabilities Act Accessibility Guidelines" (ADAAG)
3. Provide a landing at the top of each straight ramp when the Grade Along Curb (G.A.C.) is greater than 4.25 and less than 7.5%. For other values of "G", including all negative (-) values, no landing is required.
4. Minimum sidewalk width along 6" vertical curb shall be 5 feet. Minimum sidewalk width along 3" rolled curb shall be 4 feet.
5. Maximum sidewalk cross slope 0.02"/ft.
6. All sidewalk sections shall be 6" thick, except where indicated on 3" thick for shaded portions shown on details. All sidewalk sections and curb ramps, regardless of thickness, shall be paid for as "Concrete Sidewalk".
7. Where curb ramp meets pavement, bullnose will not be permitted.
8. Construct a diagonal ramp when the maximum corner radius allowed for a straight ramp is exceeded.
9. If monolithic concrete curb is constructed, strike a dummy joint across bottom of ramp at curb line. If concrete curb is drawed-on, block out pavement to provide full depth curb across ramp from outer point of curb taper to outer point of curb taper.
10. For sidewalk locations on Cul-De-Sacs, refer to "Pavement Construction Details".
11. For pavement longitudinal and transverse joints and dowel and tie bar requirements and dimensions, refer to the Pavement Construction Details for "Joints and Curbs", Std. Dwg. C0610.20.
12. For roadway cross slopes, pavement types, and thicknesses, refer to "Standard Typical Sections".
13. All curb ramps shall have a detectable warning complying with "Americans with Disabilities Act Accessibility Guidelines" (ADAAG).

TYPE 1 AND TYPE 2 CURB RAMPS	
GRADE ALONG CURB (G)	MIN. LENGTH OF RAMP SLOPE (L.P.)
NEGATIVE (-) VALUES	5
0 TO +1	7
+1.01 TO +2	8
+2.01 TO +3	10
+3.01 TO +4	12
GREATER THAN +4	15

NOTE: Positive (+)"G"- Proceeding away from intersection and up a grade.
Negative (-)"G"- Proceeding away from intersection and down a grade.



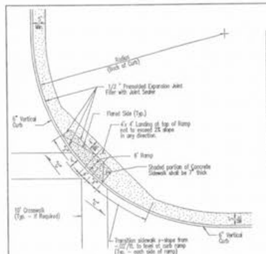
TYPE 3 CURB RAMP	
GRADE ALONG CURB (G)	MIN. LENGTH OF RAMP SLOPE (L.P.)
NEGATIVE (-) VALUES	3
0 to +2	4
+2.01 to +3	5
+3.01 to +4	6
+4.01 to +5	8
+5.01 to +6	11
GREATER THAN +6	15

NOTE: Positive (+)"G"- Proceeding away from intersection and up a grade.
Negative (-)"G"- Proceeding away from intersection and down a grade.

SAINT CHARLES COUNTY
HIGHWAY DEPARTMENT
ST. CHARLES, MISSOURI

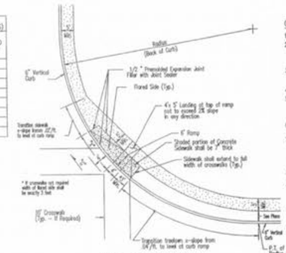
PAVEMENT CONSTRUCTION DETAILS
CONCRETE SIDEWALK AND CURB RAMPS

DATE: June, 2002 DRAWING C608.10



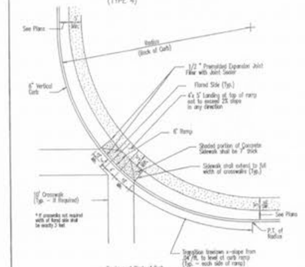
TYPE 4 AND TYPE 5 CURB RAMPS (WHERE PEDESTRIANS CAN WALK ACROSS RAMPS)	
GRADE ALONG CURB THROUGH FOUNDING (%)	LENGTH OF FLARED SIDE ALONG CURB (L.F.)
NEGATIVE(-)VALUES	5
0 TO +1	6
+1.01 TO +2	7
+2.01 TO +3	8
+3.01 TO +4	9
+4.01 TO +5	10
+5.01 TO +6	13
GREATER THAN +6	15

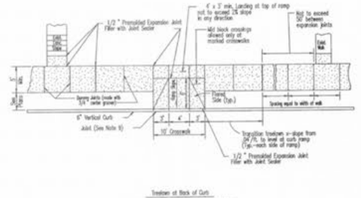
NOTE: Positive (+) "G"- Proceeding away from ramp and up a grade.
Negative (-) "G"- Proceeding away from ramp and down a grade.



GENERAL NOTES

1. Do not scale drawing. Follow dimensions.
2. Sidewalks and sidewalk curb ramps shall be constructed in accordance with these details and the current approved "Americans with Disabilities Act Accessibility Guidelines" (ADAAG)
3. Minimum sidewalk width along 6" vertical curb shall be 5 feet. Minimum sidewalk width along 3" rolled curb shall be 4 feet.
4. Maximum sidewalk cross slope 0.02"/ft.
5. All sidewalk sections shall be 6" thick, except where indicated on 3" thick for shaded portions shown on details. All sidewalk sections and curb ramps, regardless of thickness, shall be paid for as "Concrete Sidewalk".
6. Where curb ramp meets pavement, bullnose will not be permitted.
7. If monolithic concrete curb is constructed, strike a dummy joint across bottom of ramp at curb line. If concrete curb is drawed-on, block out pavement to provide full depth curb across ramp from outer point of curb taper to outer point of curb taper.
8. For sidewalk locations on Cul-De-Sacs, refer to "Pavement Construction Details".
9. For pavement longitudinal and transverse joints and dowel and tie bar requirements and dimensions, refer to the Pavement Construction Details for "Joints and Curbs", Std. Dwg. C0610.20.
10. For roadway cross slopes, pavement types, and thicknesses, refer to "Standard Typical Sections".
11. All curb ramps shall have a detectable warning complying with "Americans with Disabilities Act Accessibility Guidelines" (ADAAG).

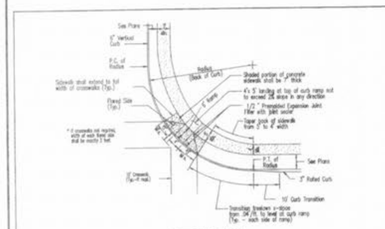


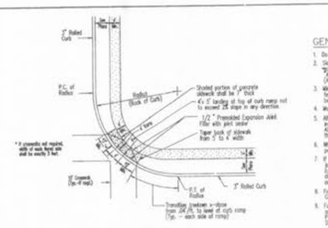


SAINT CHARLES COUNTY
HIGHWAY DEPARTMENT
ST. CHARLES, MISSOURI

PAVEMENT CONSTRUCTION DETAILS
CONCRETE SIDEWALK AND CURB RAMPS

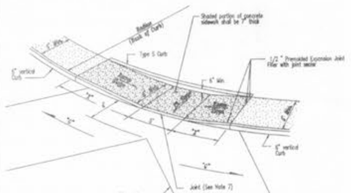
DATE: June, 2002 DRAWING C608.11

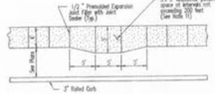




GENERAL NOTES

1. Do not scale drawing. Follow dimensions.
2. Sidewalks and sidewalk curb ramps shall be constructed in accordance with these details and the current approved "Americans with Disabilities Act Access Ability Guidelines" (ADAAG)
3. Minimum sidewalk width along 6" vertical curb shall be 5 feet. Minimum sidewalk width along 3" rolled curb shall be 4 feet.
4. Maximum sidewalk cross slope 0.02"/ft.
5. All sidewalk sections shall be 6" thick, except where indicated on 3" thick for shaded portions shown on details. All sidewalk sections and curb ramps, regardless of thickness, shall be paid for as "Concrete Sidewalk".
6. Where curb ramp meets pavement, bullnose will not be permitted.
7. If integral concrete curb is constructed, strike a dummy joint across bottom of ramp at curb line. If concrete curb is drawed-on, block out pavement to provide full depth curb across ramp from outer point of curb taper to outer point of curb taper.
8. For sidewalk locations on Cul-De-Sacs, refer to "Pavement Construction Details".
9. For pavement longitudinal and transverse joints and dowel and tie bar requirements and dimensions, refer to the Pavement Construction Details for "Joints and Curbs", Std. Dwg. C0610.20.
10. For roadway cross slopes, pavement types, and thicknesses, refer to "Standard Typical Sections".
11. The intersection of two sidewalks or the intersection of a sidewalk and a driveway must serve as a wheelchair passing space on sidewalks less than 5 feet wide.
12. All curb ramps shall have a detectable warning complying with "Americans with Disabilities Act Accessibility Guidelines" (ADAAG).





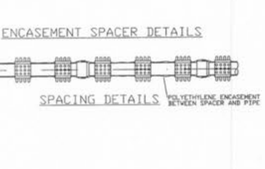
TYPE 10 CURB RAMP	
GRADE ALONG CURB THROUGH FOUNDING (%)	LENGTH OF FLARED SIDE ALONG CURB (L.F.)
NEGATIVE (-) VALUES	5
0 TO +1	6
+1.01 TO +2	7
+2.01 TO +3	8
+3.01 TO +4	9
GREATER THAN +4	15

NOTE: Positive (+) "G"- Proceeding away from ramp and up a grade.
Negative (-) "G"- Proceeding away from ramp and down a grade.

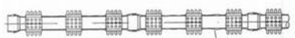
SAINT CHARLES COUNTY
HIGHWAY DEPARTMENT
ST. CHARLES, MISSOURI

PAVEMENT CONSTRUCTION DETAILS
CONCRETE SIDEWALK AND CURB RAMPS

DATE: June, 2002 DRAWING C608.12



ENCASEMENT SPACER DETAILS



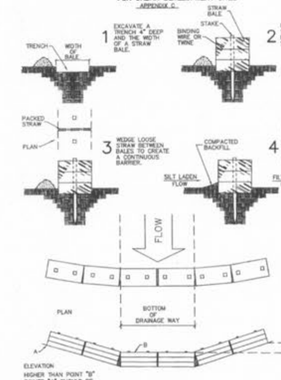
SPACING DETAILS

BORING NOTES

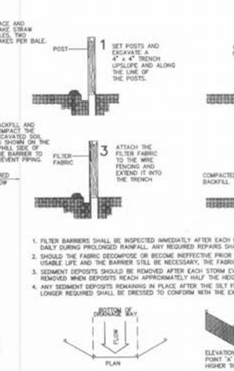
1. DO NOT SCALE DRAWING. FOLLOW DIMENSIONS.
2. INSTALLATION OF THE CASING AND CARRIER PIPES SHALL MEET THE REQUIREMENTS FOR THE CITY OF O'FALLON SPECIFICATIONS.
3. ALL JOINTS IN THE CASING PIPE SHALL BE WELDED.
4. THE PIPE TO BE PLACED IN THE BORE HOLE SHALL BE CAST-IRON PIPE EXCEPT AS REQUIRED ON THE PLANS.
5. STEEL CASING PIPE USED IN THE INSTALLATION OF WATER OR SEWER LINE AND CONDUITS SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 P.S.I.
6. CARRIER PIPE SHALL BE 8" DIA. DUCTILE IRON.
7. CASING PIPE SHALL BE 10" DIA. STEEL.(0.281" WALL THICKNES).
8. NOTE: EXISTING FACILITIES ARE TO REMAIN IN USE AT ALL TIMES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SERVICE LINES AND UTILITIES PRIOR TO CONSTRUCTION.
9. RESTRAINING JOINTS SHALL BE USED ON THE CARRIER PIPE.
10. DESIGNER SHALL SUBMIT CARRIER PIPE AND CHASING PIPE SIZE AND COMBINATION FOR REVIEW AND APPROVAL.

STRAW BALES BARRIERS FOR URBAN DEVELOPMENT SITES

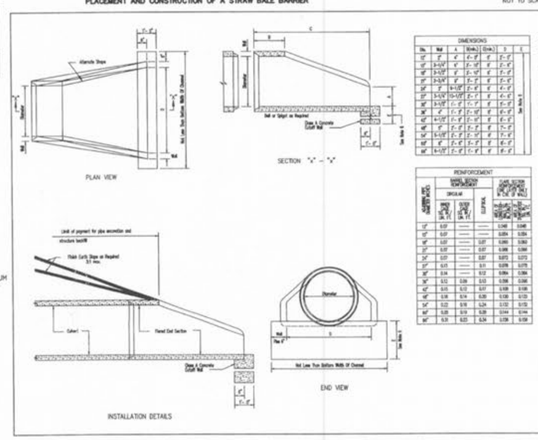
APPENDIX C



PLACEMENT AND CONSTRUCTION OF A STRAW BALE BARRIER



SILTATION FENCE DETAIL
NOT TO SCALE



DIMENSIONS							
Dia.	Wall	A	B Min.	C Min.	D min.	E	F
12"	2"	2'-0"	4"	4"	1'-0"	4"	1'-0"
15"	2"	2'-3"	4"	4"	1'-0"	4"	1'-0"
18"	2"	2'-6"	4"	4"	1'-0"	4"	1'-0"
21"	2-1/2"	2'-9"	4"	4"	1'-0"	4"	1'-0"
24"	3"	3'-0"	4"	4"	1'-0"	4"	1'-0"
27"	3"	3'-3"	4"	4"	1'-0"	4"	1'-0"
30"	4"	3'-6"	4"	4"	1'-0"	4"	1'-0"
33"	4-1/2"	3'-9"	4"	4"	1'-0"	4"	1'-0"
36"	5"	4'-0"	4"	4"	1'-0"	4"	1'-0"
42"	6"	4'-6"	4"	4"	1'-0"	4"	1'-0"
48"	6-1/2"	5'-0"	4"	4"	1'-0"	4"	1'-0"

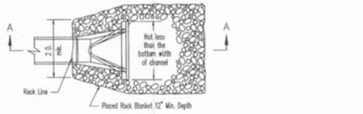
GENERAL NOTES

1. Do not scale drawing. Follow dimensions.
2. Slight variations in both shape and dimensions of the flared end section may be accepted if approved by the Engineer.
3. For more than three (3) lines may be offset by 1/2 the Out Out Section for Building and Wall.
4. Off-Set of two will be permitted to prevent Skew Back.
5. Could Not may be cast-in-place if precast.
6. Skew Back is not required on Diameters of 24 inch and smaller.
7. For construction details refer to the latest Concrete Safety Manual, Chapter 5, "Precast Concrete Products".
8. The details shown are adapted from the Precast Concrete Pipe Specification, Standard Drawings.

REINFORCEMENT

DIAMETER	SINGLE CIRCULAR CAGE		DOUBLE CIRCULAR CAGE	
	INNER CAGE (IN²/FT)	OUTER CAGE (IN²/FT)	INNER CAGE (IN²/FT)	OUTER CAGE (IN²/FT)
12"	0.07	----	0.040	0.040
15"	0.07	----	0.054	0.054
18"	0.07	----	0.067	0.067
21"	0.07	----	0.081	0.081
24"	0.07	----	0.095	0.095
27"	0.15	----	0.075	0.075
30"	0.14	----	0.084	0.084
33"	0.21	0.06	0.098	0.098
36"	0.28	0.07	0.109	0.109
42"	0.28	0.14	0.128	0.128
48"	0.28	0.21	0.128	0.128
54"	0.32	0.28	0.128	0.128
60"	0.28	0.35	0.144	0.144
66"	0.28	0.42	0.144	0.144
72"	0.28	0.49	0.144	0.144
78"	0.28	0.56	0.144	0.144
84"	0.28	0.63	0.144	0.144

SAINT CHARLES COUNTY
HIGHWAY DEPARTMENT
ST. CHARLES, MISSOURI
SEWER CONSTRUCTION DETAILS
FLARED END SECTION
(PRECAST CONCRETE)
DATE: June, 2002 DRAWING C604.40

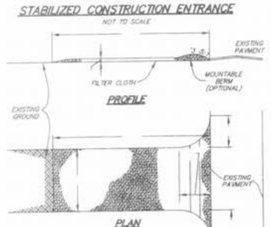


NOTE:
1. To be used at intake and discharge end of pipe. Grade of Rock Blanket to be adjusted accordingly.
2. Woven Geotextile Fabric required under Rock Blanket.

SAINT CHARLES COUNTY
HIGHWAY DEPARTMENT
ST. CHARLES, MISSOURI
SEWER CONSTRUCTION DETAILS
FLARED END SECTION
(INLET/OUTLET PROTECTION)
DATE: June, 2002 DRAWING C604.42

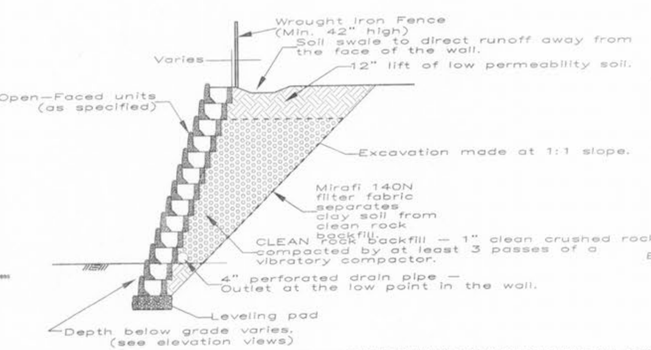
STABILIZED CONSTRUCTION ENTRANCE

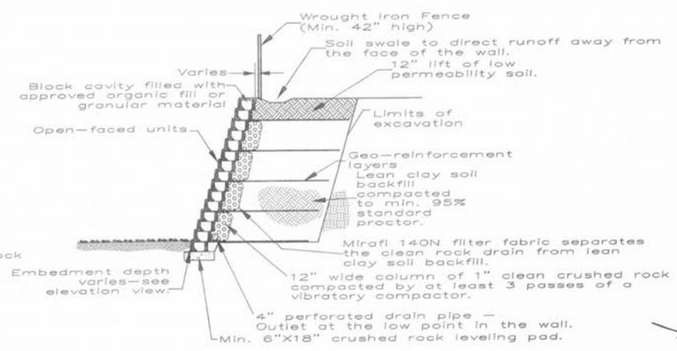
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. Stone Size -- Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length -- As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness -- Not less than six (6) inches.
4. Width -- Twenty six (26) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth -- Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water -- All surface water flowing or diverted toward construction entrances shall be piped across 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. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing -- Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. 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 after each rain.



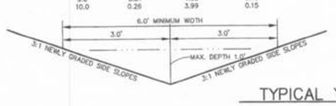


UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.

OPEN-FACED REINFORCED WALL SECTION
N.T.S.

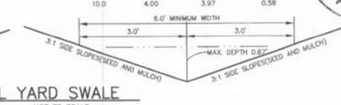
Maximum Discharge (Q) = 4.00 cfs
Maximum Velocity (V) = 4.00 ft/sec
N = 0.020 (soil)
Maximum side slopes = 3 (horizontal) :1 (vertical)

Longitudinal Slope (%)	Discharge (cfs)	Velocity (ft/sec)	Depth (ft)
0.5	4	2.57	0.72
1.0	4	3.33	0.63
2.0	2.94	4.00	0.50
3.0	1.60	4.00	0.37
4.0	1.04	4.00	0.29
5.0	0.74	3.99	0.25
6.0	0.56	3.99	0.22
7.0	0.45	4.00	0.19
8.0	0.37	4.00	0.17
9.0	0.31	4.00	0.16
10.0	0.26	3.99	0.15



Maximum Discharge (Q) = 4.00 cfs
Maximum Velocity (V) = 4.00 ft/sec
N = 0.050 (grass)
Maximum side slopes = 3 (horizontal) :1 (vertical)

Longitudinal Slope (%)	Discharge (cfs)	Velocity (ft/sec)	Depth (ft)
0.5	1.30	0.95	0.67
1.0	1.84	1.38	0.67
2.0	2.60	1.95	0.67
3.0	3.19	2.39	0.67
4.0	3.68	2.76	0.67
5.0	4.00	3.06	0.66
6.0	4.00	3.28	0.64
7.0	4.00	3.47	0.62
8.0	4.00	3.65	0.60
9.0	4.00	3.82	0.59
10.0	4.00	3.97	0.58



TYPICAL YARD SWALE
NOT TO SCALE

STATE OF MISSOURI
RICHARD L. FRANCIS
NUMBER E-25051
12-23-05
REGISTERED PROFESSIONAL ENGINEER

12
17