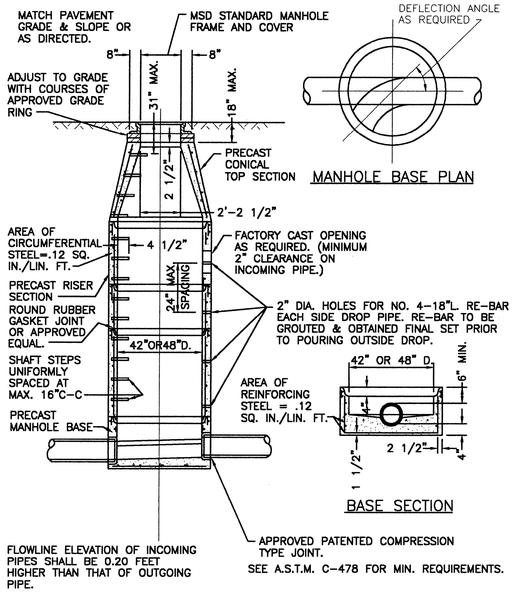
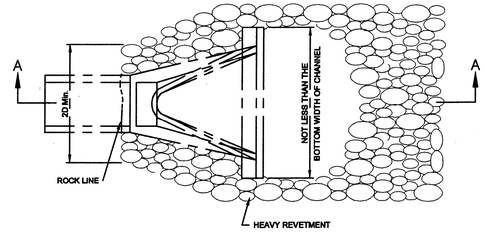
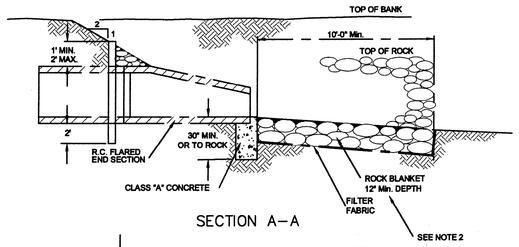


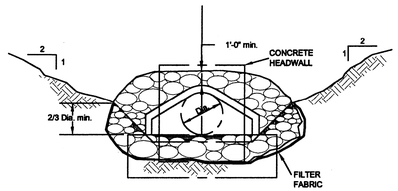
1 MANHOLE DETAIL
SCALE: N.T.S. REF. DWG.



PLAN VIEW



SECTION A-A



END VIEW

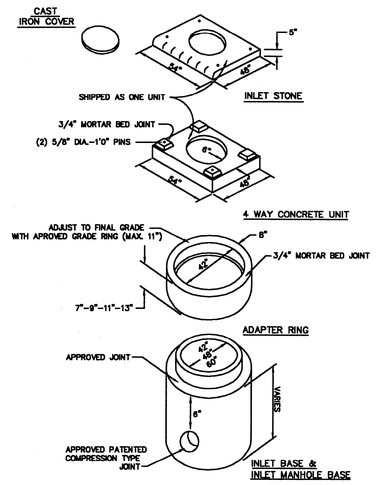
NOTES:

1. TO BE USED AT INTAKE AND DISCHARGE END OF PIPE, GRADE OF ROCK BLANKET TO BE ADJUSTED ACCORDINGLY.
2. ROCK BLANKET THICKNESS, BEDDING TYPE IDENTIFIED ON SHEET CS.0

BEDDING TYPE	MIN. THICKNESS(IN.)
MSD-5 ROCK BLANKET	12
MSD-8 HEAVY REVETMENT	24

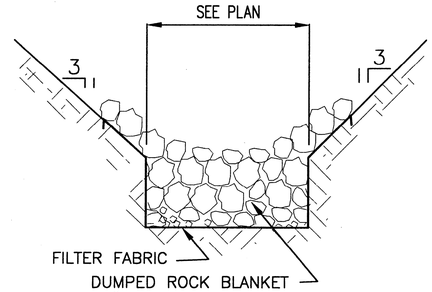
3. RIP-RAP SHOWN AT FLARED ENDS WILL BE EVALUATED IN THE FIELD AFTER INSTALLATION FOR EFFECTIVENESS AND FIELD MODIFIED, IF NECESSARY, TO REDUCE EROSION ON AND OFF-SITE.

2 FLARED END SECTION
SCALE: N.T.S. REF. DWG.



3 AREA INLET DETAIL
SCALE: N.T.S. REF. DWG.

NOTE: A 5/8" TRASH BAR WILL BE INSTALLED AND CENTERED ACROSS ALL AREA INLET AND CURB INLET OPENINGS

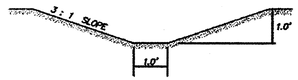


NOTE: DUMPED ROCK BLANKET TO BE A MIN. 12" DIA. QUARRY RUN STONE.

4 ROCK BLANKET DETAIL
SCALE: N.T.S. REF. DWG.

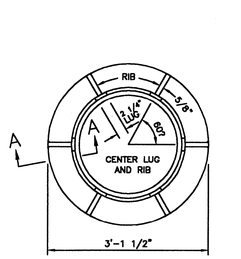
TYPICAL TEMPORARY DIVERSION SWALE

SWALE IS TO BE SEEDED.

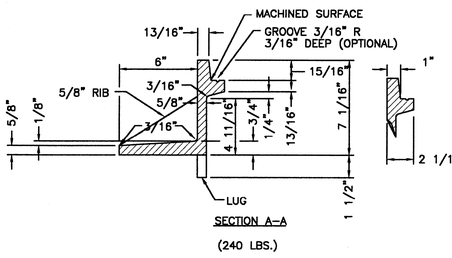


DIVERSION SWALE
N.T.S.
n = 0.02

SWALE @ 1.0% - Q = 19.86 c.f.s.
SWALE @ 10.0% - Q = 62.79 c.f.s.

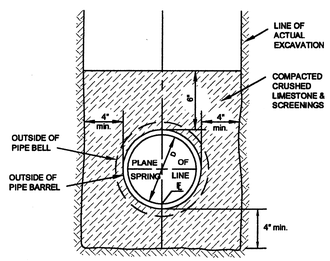


CAST IRON MANHOLE FRAME

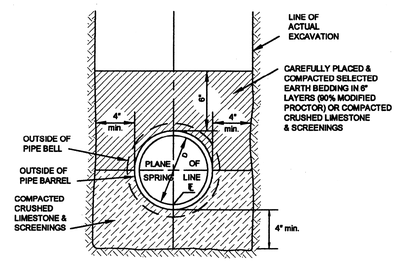


SECTION A-A
(240 LBS.)

5 CAST IRON MANHOLE FRAME DETAIL
SCALE: N.T.S. REF. DWG.



4 PIPE BEDDING DETAIL (FOR ALL EXCEPT RCP)
SCALE: N.T.S. REF. DWG.



6 PIPE BEDDING DETAIL (FOR RCP)
SCALE: N.T.S. REF. DWG.

North American Green - Erosion Control Materials Design Software Ver.4.1 - Channel 11/15/2007 08:27 AM COMPUTED BY: KDK
PROJECT NAME: PARK AVENUE VILLAGE PROJECT NUMBER: 07-0075
FROM STATION/REACH: A-A TO STATION/REACH: DRAINAGE AREA: DESIGN FREQUENCY:

HYDRAULIC RESULTS

Discharge (cfs)	Peak Flow Period (hrs)	Velocity (fps)	Area (sq.ft.)	Hydraulic Radius(ft)	Normal Depth (ft)
8.9	0.3	1.23	5.60	0.37	0.66

Unreinforced Vegetation
$n = 0.0200$
Bottom Width = 6.00 ft
1 / 3.0 / 1 / 15.0

LINER RESULTS — Not to Scale

Reach	Material Type / Shape Pattern	Phase / Class	Veg. Type / Veg. Density	Soil Type	Manning's 'n'	Permissible Shear Stress (psf)	Calculated Shear Stress (psf)	Safety Factor	Remarks
Straight	Unreinforced		Mix		0.088	3.33	0.70	4.78	STABLE
		D	75-95%	Clay		0.070	0.005	12.74	STABLE

A-A

North American Green - Erosion Control Materials Design Software Ver.4.1 - Channel 11/15/2007 08:27 AM COMPUTED BY: KDK
PROJECT NAME: PARK AVENUE VILLAGE PROJECT NUMBER: 07-0075
FROM STATION/REACH: B-B TO STATION/REACH: DRAINAGE AREA: DESIGN FREQUENCY:

HYDRAULIC RESULTS

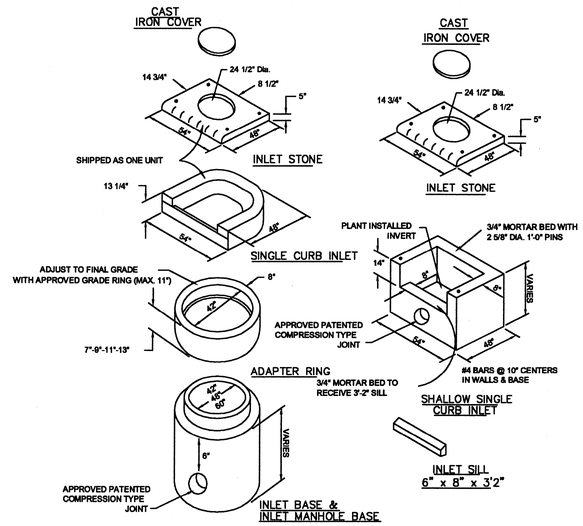
Discharge (cfs)	Peak Flow Period (hrs)	Velocity (fps)	Area (sq.ft.)	Hydraulic Radius(ft)	Normal Depth (ft)
8.5	0.3	0.68	5.32	0.29	0.45

Unreinforced Vegetation
$n = 0.0200$
Bottom Width = 6.00 ft
1 / 15.0 / 1 / 15.0

LINER RESULTS — Not to Scale

Reach	Material Type / Shape Pattern	Phase / Class	Veg. Type / Veg. Density	Soil Type	Manning's 'n'	Permissible Shear Stress (psf)	Calculated Shear Stress (psf)	Safety Factor	Remarks
Straight	Unreinforced		Mix		0.139	3.33	0.156	5.98	STABLE
		D	75-95%	Clay		0.070	0.002	39.34	STABLE

B-B



7 SINGLE STREET INLET DETAIL
SCALE: N.T.S. REF. DWG.

NOTE: BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES. PRECAST CONCRETE STRUCTURES ARE TO BE USED UNLESS OTHERWISE APPROVED BY THE CITY.

REVISIONS

DESC.	DATE
CITY OF O'FALLON COMMENTS	11/19/2007
CITY OF O'FALLON COMMENTS	12/17/2007
CITY OF O'FALLON COMMENTS	02/01/2008
CITY OF O'FALLON COMMENTS	02/25/2008
CITY OF O'FALLON COMMENTS	03/07/2008

DEVELOPER/OWNER:
MCEAGLE DEVELOPMENT
1001 BOARDWALK SPRINGS PL
O'FALLON, MO 63366
PHONE: (636) 561-9323

THE PROFESSIONAL WORK SIGNATURE AND PERSONAL SEAL APPEAR HEREON WERE PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALL OTHER PLANS, (PURSUANT TO SECTION 327.411 RSMo). ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL ENGINEER SHALL NOT BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

SEAL: STATE OF MISSOURI — MATTHEW A. SCHNEIDER — NUMBER PE-2007034893 — PROFESSIONAL ENGINEER — 2/07/08

PLANNING AND DEVELOPMENT DEPARTMENT FILE #9831.57 (AREA PLAN-APPROVED MAY 24TH, ORDINANCE #5178) - 9831.57.01 (FINAL PLAN)

PARK AVENUE VILLAGE
MASS GRADING PLANS
PHOENIX PARKWAY
O'FALLON, MO

DETAILS

planning • engineering • surveying • landscape architecture
Cole and ASSOCIATES INCORPORATED
10777 sunset office drive
saint louis, missouri 63127
p: 314 984 9887 f: 314 984 0587

DESIGNED BY: CJB
DRAWN BY: CJB
CHECKED BY: TDB
DATE: 8/17/07
Job Number: 07-075
Sheet Number: G6.2

LAYOUT: G6.2
DATE: Mar 07, 2008 - 4:46pm
DRAWING: S:\JOBS\Jobs2007\07-0075_COT-0075\dwg\MASS GRADING PLANS\0_GP_LAN_G6.0 DETAILS.dwg