

MAP NO. 178-178  
CASE NO. SC14-10-88

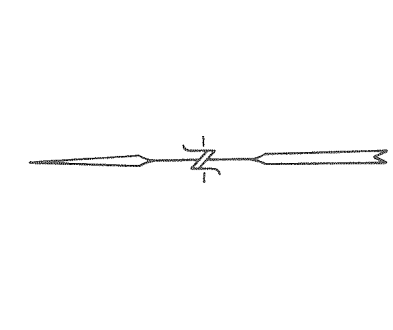
# TIMBERS ESTATES RESUBDIVISION

A RESUBDIVISION OF TIMBERS ESTATES, EXCEPT TRACT G, AND LOT 17, THE EVERGREEN MEADOWS UNIT 10 IN THE E1/2 OF SECTION 26 AND THE NW1/4 SW1/4 OF SECTION 25, T.5S., R.71W., 6TH P.M., COUNTY OF JEFFERSON, STATE OF COLORADO

EVERGREEN HIGHLANDS UNIT 2  
REC. NO. 42507  
BOOK 35 PAGE 27-31

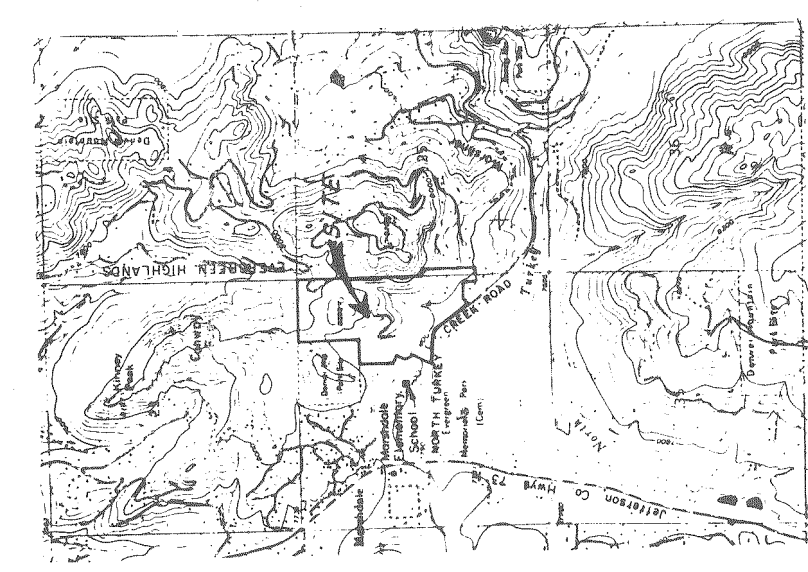
BK 100 Pg 49 Rec # 89048196  
UNPLATTED

NW CORNER NE1/4 NE1/4 SECTION 26, FOUND NO. 5 REBAR W/CAP L.S. NO. 2816

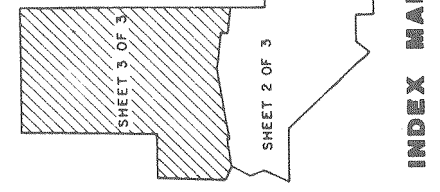


CURVE DATA CHART

CURVE NO.	DELTA (DEGREES)	RADIUS (FEET)	ARC LENGTH (FEET)	CHORD BEARING	CHORD LENGTH (FEET)
1	16°36'07"	184.45'	47.65'	S74°56'07"W	47.48'
2	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
3	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
4	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
5	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
6	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
7	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
8	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
9	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
10	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
11	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
12	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
13	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
14	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
15	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
16	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
17	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
18	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
19	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
20	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
21	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
22	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
23	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
24	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
25	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
26	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
27	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
28	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
29	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
30	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
31	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
32	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
33	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
34	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'
35	10°31'27"	224.45'	41.23'	N77°58'30"E	131.05'
36	59°34'39"	175.92'	76.94'	N88°58'28"W	75.435'
37	144°58'08"	70.00'	177.61'	S70°19'47"W	227.94'

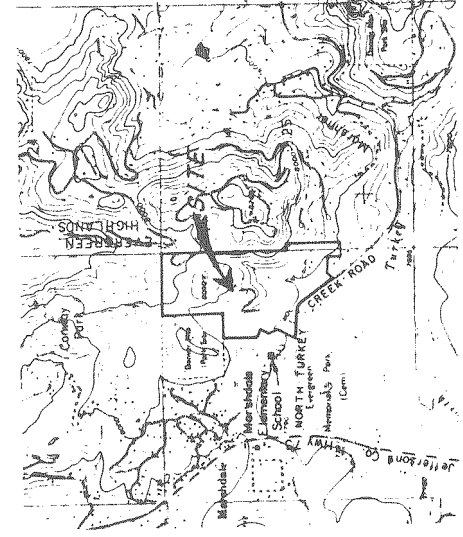


VICINITY MAP  
SCALE: 1"=1000'

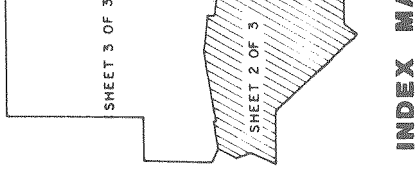


INDEX MAP

AGE ENGINEERING INC.  
CONSULTING ENGINEERS  
& LAND SURVEYORS  
150 W. HAMPSHIRE AVE. SUITE 160  
ENGLEWOOD, COLORADO 80150  
PHONE (303) 781-9474



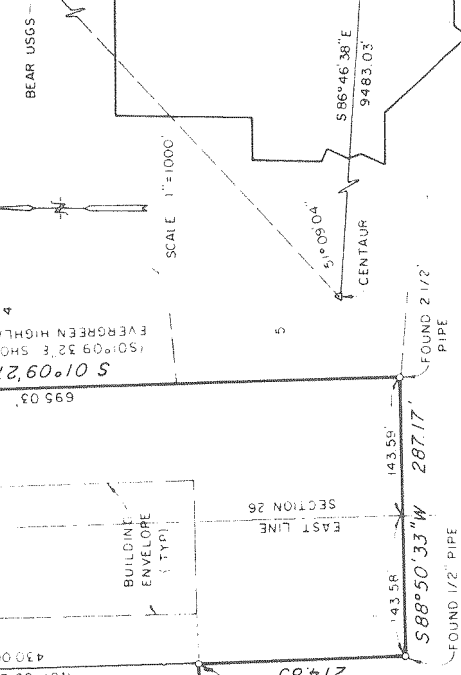
VICINITY MAP  
SCALE: 1"=1000'



INDEX MAP

AGE ENGINEERING INC.  
CONSULTING ENGINEERS  
& LAND SURVEYORS  
150 W. HAMPSHIRE AVE. SUITE 160  
ENGLEWOOD, COLORADO 80150  
PHONE (303) 781-9474

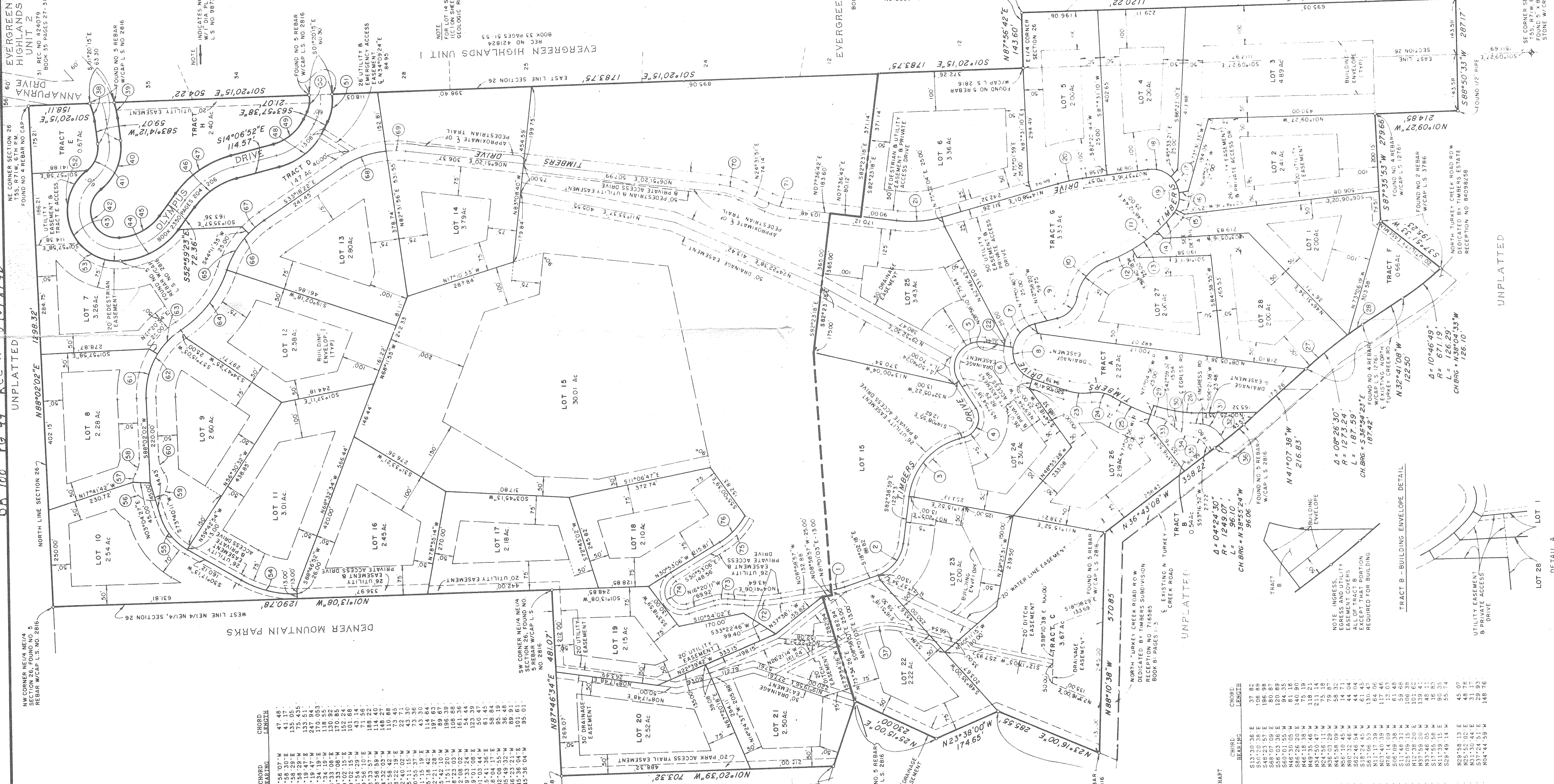
## GEODETIC CONTROLS



NOTE: ALL DISTANCES HORIZONTAL  
AND BEARINGS MONUMENTS  
NE CORNER SEC 26  
E1/4 CORNER SEC 26

UNPLATTED

DETAIL A  
LOT 1  
LOT 28



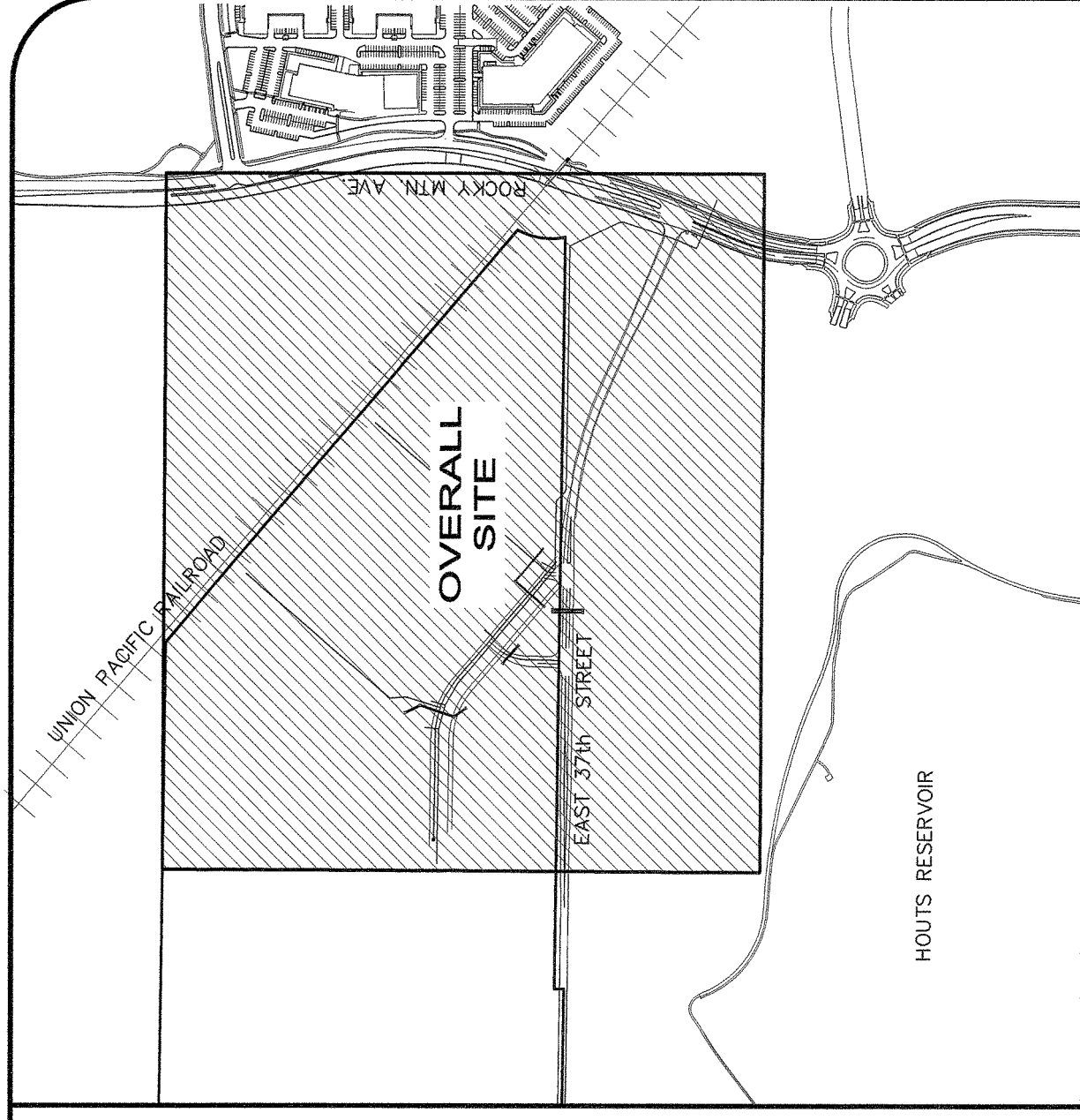
SAVANNA ADDITION, FIRST SUBDIVISION  
SWMP STATIC PLAN  
STAGE 1 - GRADING STAGE

DATE: 08-30-2009  
PROJECT: 750-087  
DESIGNED BY: C. WILKEN  
DRAWN BY: C. SAYELAND  
REVIEWED BY: J. TUFTS

**N**  
**E**  
**NORTHERN**  
**ENGINEERING**  
200 South College Avenue, Suite 100  
Fort Collins, Colorado 80524  
PHONE: 970.221.4156 FAX: 970.221.4199  
www.northernengineering.com

These drawings are the property of Northern Engineering Services, Inc. and shall not be used for any type of construction unless signed and sealed by a Professional Engineer in the employ of Northern Engineering Services, Inc.

Revisions:  
No. \_\_\_\_\_ Date \_\_\_\_\_  
**REVIEW SET**  
NOT FOR CONSTRUCTION  
06/30/09



KEYMAP

**LEGEND:**

EXISTING CONTOUR	---
EXISTING CURB AND GUTTER	———
EXISTING ELECTRICAL LIGHT	⊕
EXISTING BARBED WIRE FENCE	x
EXISTING IRRIGATION CONTROL	☼
EXISTING PNEUMETER	○
EXISTING EASEMENTS	--- ---
EXISTING SIGN	Ⓚ
EXISTING STORM SEWER	—W—
EXISTING WATER VALVE	⊕
EXISTING FIRE HYDRANT	⊕
PROPOSED PROPERTY LINE	———
PROPOSED CONTOURS	—●—
PROPOSED ASPHALT TRAIL (10' WIDE)	—S—
PROPOSED INLET FILTER	Ⓜ
PROPOSED WATTLE DIKE IN SWALE	—— ——
PROPOSED RIPRAP	—— ——
PROPOSED VEHICLE TRACKING PAD	—— ——
PROPOSED SILT FENCE	—— ——
PROPOSED ROCK DIKE	—— ——
REFERENCE CITY OF LOVELAND SPECIFICATION SECTION 02377 "VEGETATIVE EROSION CONTROL" FOR SEEDING MIX AND REQUIREMENTS	—— ——
SLOPE PROTECTION - CONTRACTOR TO USE TRACED VEHICLE, RUN BIT RILL/GUILLEY EROSION, CONTRACTOR MAY USE OTHER WINDROW-TYPE EROSION CONTROL MEASURES AT ALL SLOPES. REPEAT AS NECESSARY UNTIL LANDSCAPING IS INSTALLED	—— ——
CONCRETE WASHOUT AREA - DETERMINED BY CONTRACTOR	—— ——
PORTABLE TOILET LOCATION - DETERMINED BY CONTRACTOR	○
GRADING RIDGE	.....



DATE: 08-30-2009 11:07:38 AM  
PROJECT: 750-087  
DRAWN BY: C. SAYELAND  
DESIGNED BY: C. WILKEN  
REVIEWED BY: J. TUFTS

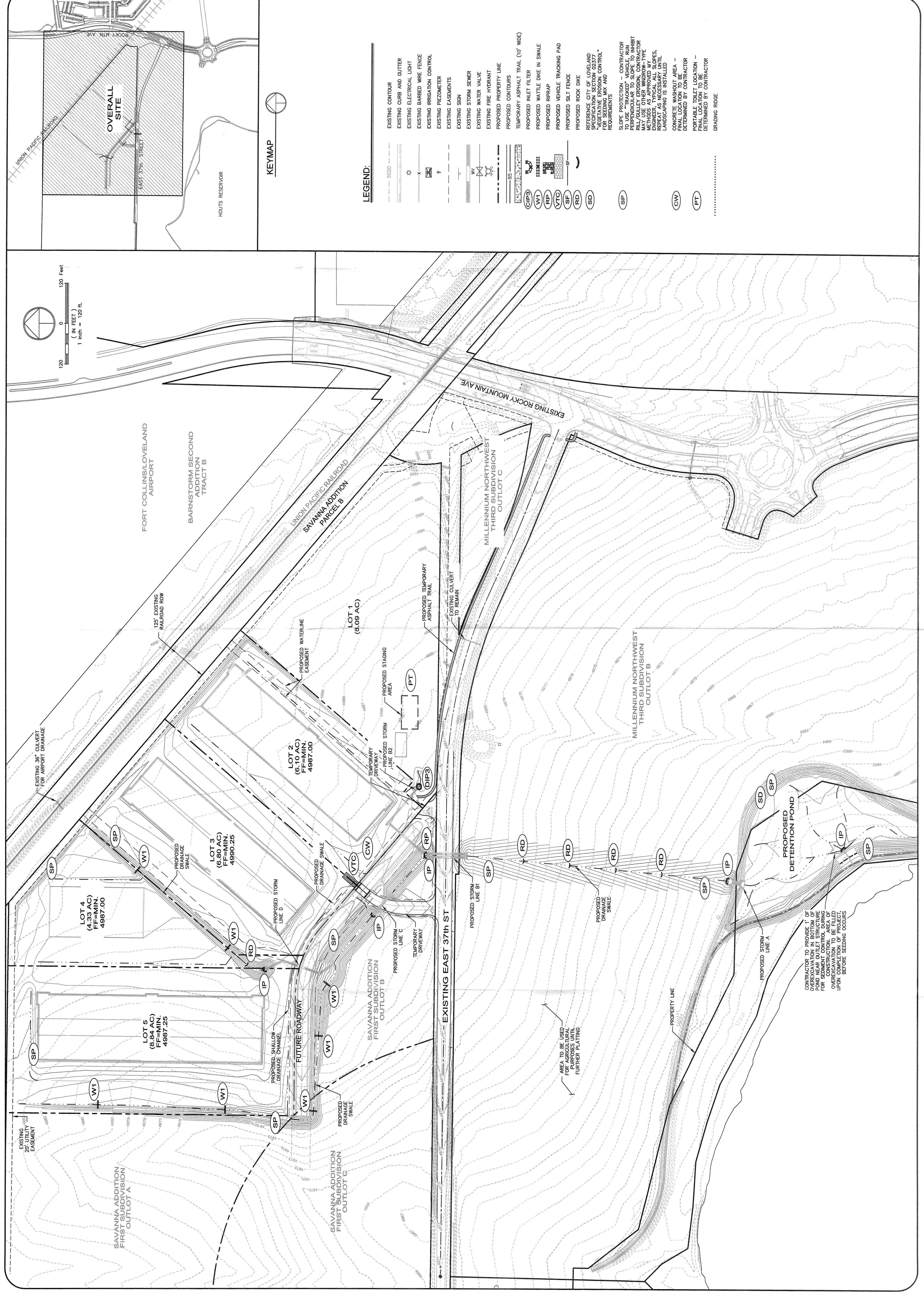
SAVANNA ADDITION, FIRST SUBDIVISION  
**SWMP STATIC PLAN**  
 STAGE 2 - INFRASTRUCTURE STAGE

DATE:	06-20-2009
DESIGNED BY:	C. WELKEN
DRAWN BY:	C. SAEFLAND
REVIEWED BY:	L. TULTE

**NE**  
 NORTHERN ENGINEERING  
 200 South College Avenue, Suite 100  
 Fort Collins, Colorado 80524  
 PHONE: 970.221.4138 FAX: 970.221.4139  
 www.northernengineering.com

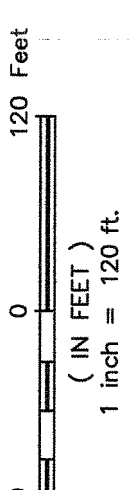
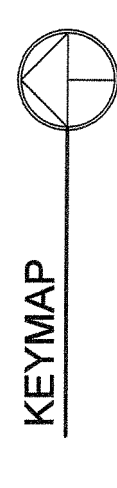
These drawings are instruments of service provided by Northern Engineering Services, Inc. and are not to be used for any type of construction unless signed and sealed by a Professional Engineer in the State of Colorado.

**REVIEW SET**  
 NOT FOR CONSTRUCTION  
 06/30/09



**LEGEND:**

- EXISTING CONTOUR
- EXISTING CURB AND GUTTER
- EXISTING ELECTRICAL LIGHT
- EXISTING BARBED WIRE FENCE
- EXISTING IRRIGATION CONTROL
- EXISTING PIEZOMETER
- EXISTING EASEMENTS
- EXISTING SIGN
- EXISTING STORM SEWER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- PROPOSED PROPERTY LINE
- PROPOSED CONTOURS
- PROPOSED ASPHALT TRAIL (10' WIDE)
- PROPOSED INLET FILTER
- PROPOSED WATTLE DIKE IN SWALE
- PROPOSED RIPRAP
- PROPOSED VEHICLE TRACKING PAD
- PROPOSED SILT FENCE
- PROPOSED ROCK DIKE
- REFERENCE CITY OF LOVELAND SPECIFICATION SECTION 02377 - EROSION CONTROL - EROSION CONTROL - SEEING SW, AND REQUIREMENTS
- SLOPE PROTECTION - CONTRACTOR TO USE "TRACKED" VEHICLE RIM PERPENDICULAR TO SLOPE TO INHIBIT RILL/GULLEY EROSION; CONTRACTOR TO PROVIDE VEGETATION AND EROSION CONTROL METHODS AS APPROVED BY ENGINEER. TYPICAL ALL SLOPES SHALL BE INSTALLED WITH LANDSCAPING US INSTALLED
- CONCRETE INSURUIT AREA - FINAL LOCATION TO BE DETERMINED BY CONTRACTOR
- PORTABLE TOILET LOCATION - FINAL LOCATION TO BE DETERMINED BY CONTRACTOR
- GRADING RIDGE



CONTRACTOR TO PROVIDE 1" OF OVEREXCAVATION IN BOTTOM OF CULVERT AND DETENTION POND FOR SEDIMENT CONTROL DURING CONSTRUCTION. AREA OF OVEREXCAVATION SHALL BE FILLED UPON COMPLETION OF PROJECT BEFORE SEEDING OCCURS.

AREA TO BE USED FOR GRASSING UNTIL FURTHER PLANTING





DATE:	06-30-2009
PROJECT:	750-087
DESIGNED BY:	C. SAYLAND
REVIEWED BY:	L. TULFE

**NORTHERN ENGINEERING**

200 South Colorado Avenue, Suite 100  
Fort Collins, Colorado 80524  
PHONE: 970.221.1858 FAX: 970.221.4199  
www.northernengineering.com

**REVIEW SET**  
NOT FOR CONSTRUCTION

06/30/09

### CONCRETE WASHOUT AREA

**NOTES:**

- CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
- VEHICLE TRACKING CONTROL (DETAIL SW-14) IS REQUIRED IF ACCESS TO CONCRETE WASHOUT AREA IS OFF PAVEMENT.
- SEAMS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED LOCATION.
- WHEN THE CONCRETE WASHOUT AREA IS BOUNDED, THE BOUNDED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CITY.

**APPROVED:** KING  
**DATE:** 8/17/07  
**DRAWN BY:** TBK

### SILT, ROCK OR WATTLE DIKE

**NOTES:**

- CONTRACTOR SHALL INSTALL DIKE WITH TWO WEEDS AND AFTER SIGNIFICANT STORM EVENTS SHALL REPAIR DIKE TO ORIGINAL CONDITION.
- DIKE SHALL BE PLACED UPSTREAM OF ANY WATTLE DIKE OR WATTLE DIKE SHALL BE PLACED UPSTREAM OF DIKE.
- DIKE SHALL BE REMOVED IN PLACE DURING THE UPSTREAM DISTURBED AREA IS STABILIZED.
- WHEN REINFORCED ROCK BERMS ARE INSTALLED, ANY DISTURBED AREA SHALL BE SEEDED, MULCHED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CITY.

**APPROVED:** KING  
**DATE:** 11/29/05  
**DRAWN BY:** TBK

### VEHICLE TRACKING CONTROL PAD

**NOTES:**

- VEHICLE TRACKING CONTROL PAD SHALL BE LOCATED AT EVERY ACCESS POINT TO THE CONSTRUCTION SITE.
- A SILT SHALL BE PLACED NEXT TO THE VEHICLE TRACKING CONTROL PAD TO DESTABILIZE THE LOCATION AS THE CONSTRUCTION ENTRANCE/EXIT.
- GRAVEL, SLATE (TYPICAL), APPROXIMATE RATIO OF 75% RIPRAP-25% STABILIZATION SOIL. PLACE TWO LIFTS (MINIMUM) WITH LARGER ROCK ON BOTTOM LIFT AND SMALLER ROCK ON TOP LIFT.
- STABILIZATION SOIL SHALL NOT BE USED. THE STABILIZATION SOIL SHALL BE A MINIMUM OF 5" AND A MAXIMUM OF 6" DEEP.
- ANY CHANGED OR UNMAINTAINED CURBS AND SIDEWALKS SHALL BE REPLACED BY CONTRACTOR.
- VEHICLE TRACKING CONTROL PAD SHALL BE TRUCKED ONTO PAVED AREAS BECOMING A SCOUR PROBLEM AS DETERMINED BY THE CITY ENGINEER.
- IF VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES ARE REQUIRED, ALL WHEELS ON EVERY VEHICLE LEAVING THE SITE SHALL BE WASHED AT A WASHOUT AREA.

**MAINTENANCE NOTES:**

- CONTRACTOR SHALL REMOVE TRACKING CONTROL PAD FROM THE SITE IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.

**APPROVED:** KING  
**DATE:** 8/17/07  
**DRAWN BY:** TBK

### EROSION CONTROL DETAILS

STORM LINE	RIPRAP TYPE	RIPRAP LENGTH (FT)	RIPRAP WIDTH (FT)	2 x D <sub>50</sub> (FT)
Storm Line A	Type L	100.0	20.0	1.5
Storm Line B1	Type L	37.0	20.0	1.5
Storm Line B2	Type L	33.0	20.0	1.5
Storm Line C	Type M	49.0	20.0	2.0
Storm Line D	Type L	40.0	20.0	1.5
100-Year Overflow Weir	Type H	50.0	78.0	3.0

**GENERAL NOTES:**

- FOR GRANULAR BEDDING REFER TO THE MAJOR DRAINAGE CHAPTER OF THE URBAN STORM DRAINAGE DESIGN MANUAL VOLUME 1, FOR RIPRAP SPECIFICATIONS.
- FOR PLANTED RIPRAP, RIPRAP SHALL BE COMPACTED BY FULL LAYING OF BROADCAST BENTONITE, AS APPROVED. ANY SOFT, WEEDING OR OTHER MATERIAL SHALL BE REMOVED FROM THE RIPRAP AREA.
- PERCENTAGE OF ROCK EXPOSED AS DIRECTED. COORDINATE ROCK PLACEMENT TO PROVIDE TREE OR SHRUB PLANTING PIT AS INDICATED ON PLANNING PLANS.

**ELITEER FABRIC NOTES:**

- FOR GRANULAR BEDDING REFER TO THE MAJOR DRAINAGE CHAPTER OF THE URBAN STORM DRAINAGE DESIGN MANUAL VOLUME 1, FOR RIPRAP SPECIFICATIONS.
- FOR PLANTED RIPRAP, RIPRAP SHALL BE COMPACTED BY FULL LAYING OF BROADCAST BENTONITE, AS APPROVED. ANY SOFT, WEEDING OR OTHER MATERIAL SHALL BE REMOVED FROM THE RIPRAP AREA.
- PERCENTAGE OF ROCK EXPOSED AS DIRECTED. COORDINATE ROCK PLACEMENT TO PROVIDE TREE OR SHRUB PLANTING PIT AS INDICATED ON PLANNING PLANS.

**APPROVED:** KING  
**DATE:** 8/17/07  
**DRAWN BY:** TBK

### VEHICLE TRACKING CONTROL PAD

**NOTES:**

- VEHICLE TRACKING CONTROL PAD SHALL BE LOCATED AT EVERY ACCESS POINT TO THE CONSTRUCTION SITE.
- A SILT SHALL BE PLACED NEXT TO THE VEHICLE TRACKING CONTROL PAD TO DESTABILIZE THE LOCATION AS THE CONSTRUCTION ENTRANCE/EXIT.
- GRAVEL, SLATE (TYPICAL), APPROXIMATE RATIO OF 75% RIPRAP-25% STABILIZATION SOIL. PLACE TWO LIFTS (MINIMUM) WITH LARGER ROCK ON BOTTOM LIFT AND SMALLER ROCK ON TOP LIFT.
- STABILIZATION SOIL SHALL NOT BE USED. THE STABILIZATION SOIL SHALL BE A MINIMUM OF 5" AND A MAXIMUM OF 6" DEEP.
- ANY CHANGED OR UNMAINTAINED CURBS AND SIDEWALKS SHALL BE REPLACED BY CONTRACTOR.
- VEHICLE TRACKING CONTROL PAD SHALL BE TRUCKED ONTO PAVED AREAS BECOMING A SCOUR PROBLEM AS DETERMINED BY THE CITY ENGINEER.
- IF VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES ARE REQUIRED, ALL WHEELS ON EVERY VEHICLE LEAVING THE SITE SHALL BE WASHED AT A WASHOUT AREA.

**MAINTENANCE NOTES:**

- CONTRACTOR SHALL REMOVE TRACKING CONTROL PAD FROM THE SITE IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.

**APPROVED:** KING  
**DATE:** 8/17/07  
**DRAWN BY:** TBK

### CONCRETE WASHOUT AREA

**NOTES:**

- CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
- VEHICLE TRACKING CONTROL (DETAIL SW-14) IS REQUIRED IF ACCESS TO CONCRETE WASHOUT AREA IS OFF PAVEMENT.
- SEAMS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED LOCATION.
- WHEN THE CONCRETE WASHOUT AREA IS BOUNDED, THE BOUNDED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CITY.

**APPROVED:** KING  
**DATE:** 8/17/07  
**DRAWN BY:** TBK

### VEHICLE TRACKING CONTROL PAD

**NOTES:**

- VEHICLE TRACKING CONTROL PAD SHALL BE LOCATED AT EVERY ACCESS POINT TO THE CONSTRUCTION SITE.
- A SILT SHALL BE PLACED NEXT TO THE VEHICLE TRACKING CONTROL PAD TO DESTABILIZE THE LOCATION AS THE CONSTRUCTION ENTRANCE/EXIT.
- GRAVEL, SLATE (TYPICAL), APPROXIMATE RATIO OF 75% RIPRAP-25% STABILIZATION SOIL. PLACE TWO LIFTS (MINIMUM) WITH LARGER ROCK ON BOTTOM LIFT AND SMALLER ROCK ON TOP LIFT.
- STABILIZATION SOIL SHALL NOT BE USED. THE STABILIZATION SOIL SHALL BE A MINIMUM OF 5" AND A MAXIMUM OF 6" DEEP.
- ANY CHANGED OR UNMAINTAINED CURBS AND SIDEWALKS SHALL BE REPLACED BY CONTRACTOR.
- VEHICLE TRACKING CONTROL PAD SHALL BE TRUCKED ONTO PAVED AREAS BECOMING A SCOUR PROBLEM AS DETERMINED BY THE CITY ENGINEER.
- IF VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES ARE REQUIRED, ALL WHEELS ON EVERY VEHICLE LEAVING THE SITE SHALL BE WASHED AT A WASHOUT AREA.

**MAINTENANCE NOTES:**

- CONTRACTOR SHALL REMOVE TRACKING CONTROL PAD FROM THE SITE IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.
- UNWASHED WHEELS SHALL BE WASHED AT THE WASHOUT AREA.

**APPROVED:** KING  
**DATE:** 8/17/07  
**DRAWN BY:** TBK

### EROSION CONTROL DETAILS

STORM LINE	RIPRAP TYPE	RIPRAP LENGTH (FT)	RIPRAP WIDTH (FT)	2 x D <sub>50</sub> (FT)
Storm Line A	Type L	100.0	20.0	1.5
Storm Line B1	Type L	37.0	20.0	1.5
Storm Line B2	Type L	33.0	20.0	1.5
Storm Line C	Type M	49.0	20.0	2.0
Storm Line D	Type L	40.0	20.0	1.5
100-Year Overflow Weir	Type H	50.0	78.0	3.0

**GENERAL NOTES:**

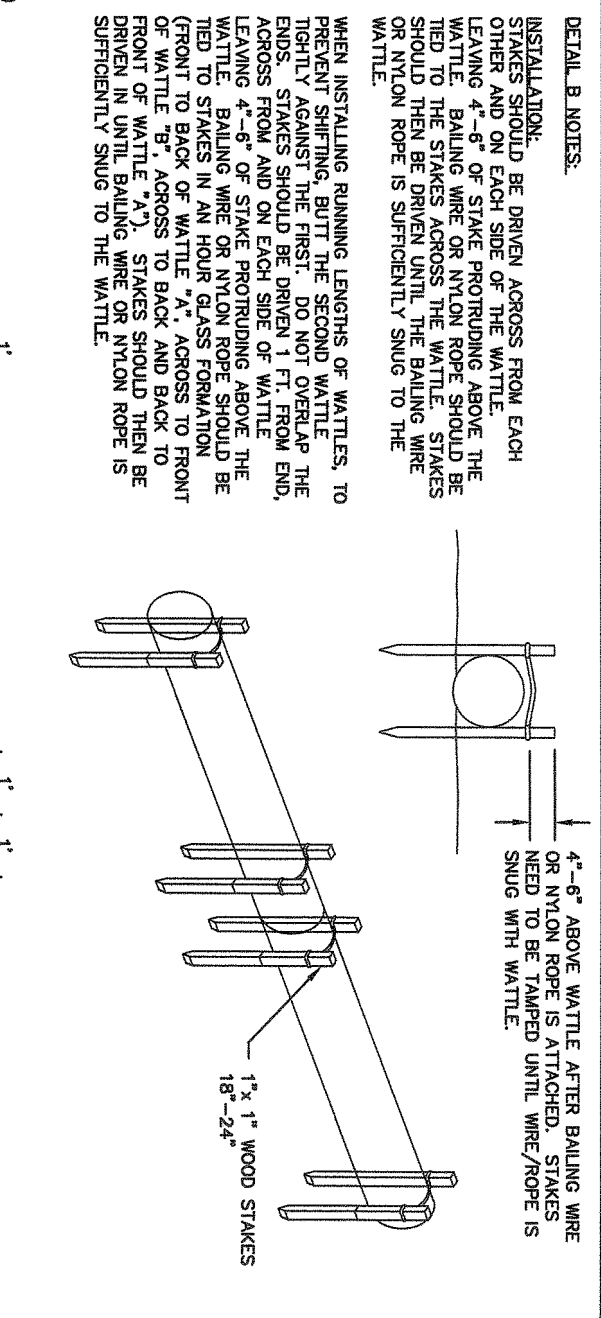
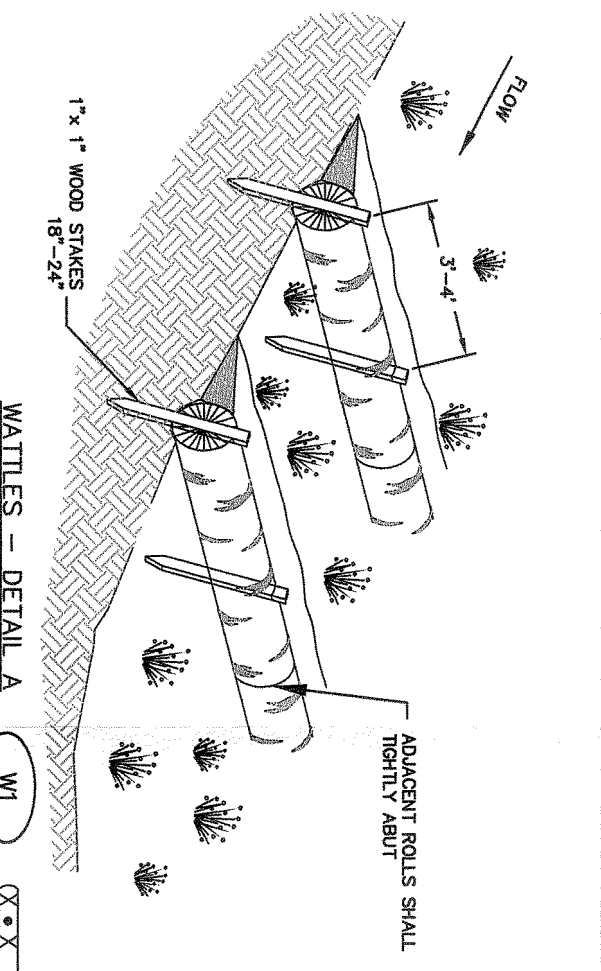
- FOR GRANULAR BEDDING REFER TO THE MAJOR DRAINAGE CHAPTER OF THE URBAN STORM DRAINAGE DESIGN MANUAL VOLUME 1, FOR RIPRAP SPECIFICATIONS.
- FOR PLANTED RIPRAP, RIPRAP SHALL BE COMPACTED BY FULL LAYING OF BROADCAST BENTONITE, AS APPROVED. ANY SOFT, WEEDING OR OTHER MATERIAL SHALL BE REMOVED FROM THE RIPRAP AREA.
- PERCENTAGE OF ROCK EXPOSED AS DIRECTED. COORDINATE ROCK PLACEMENT TO PROVIDE TREE OR SHRUB PLANTING PIT AS INDICATED ON PLANNING PLANS.

**ELITEER FABRIC NOTES:**

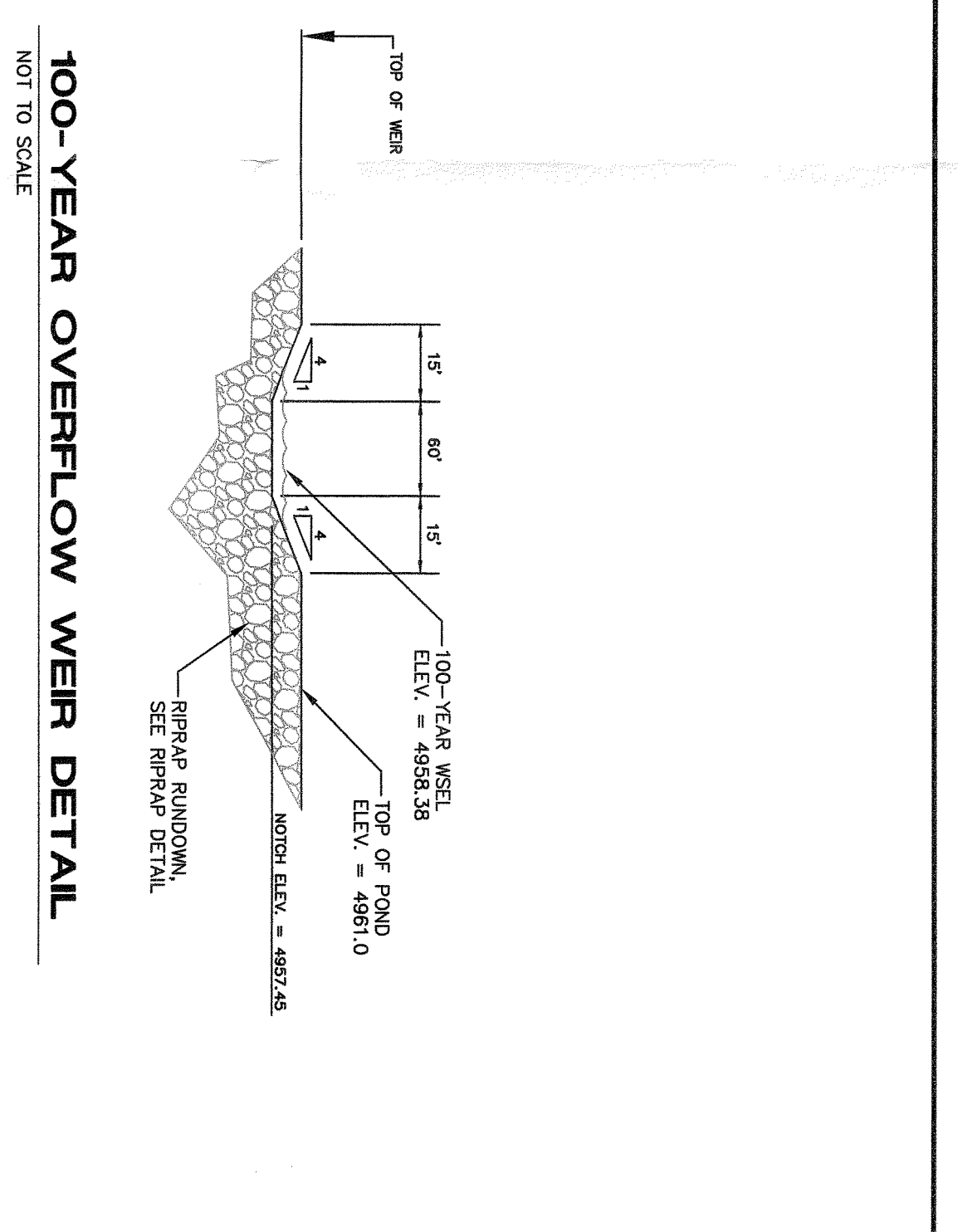
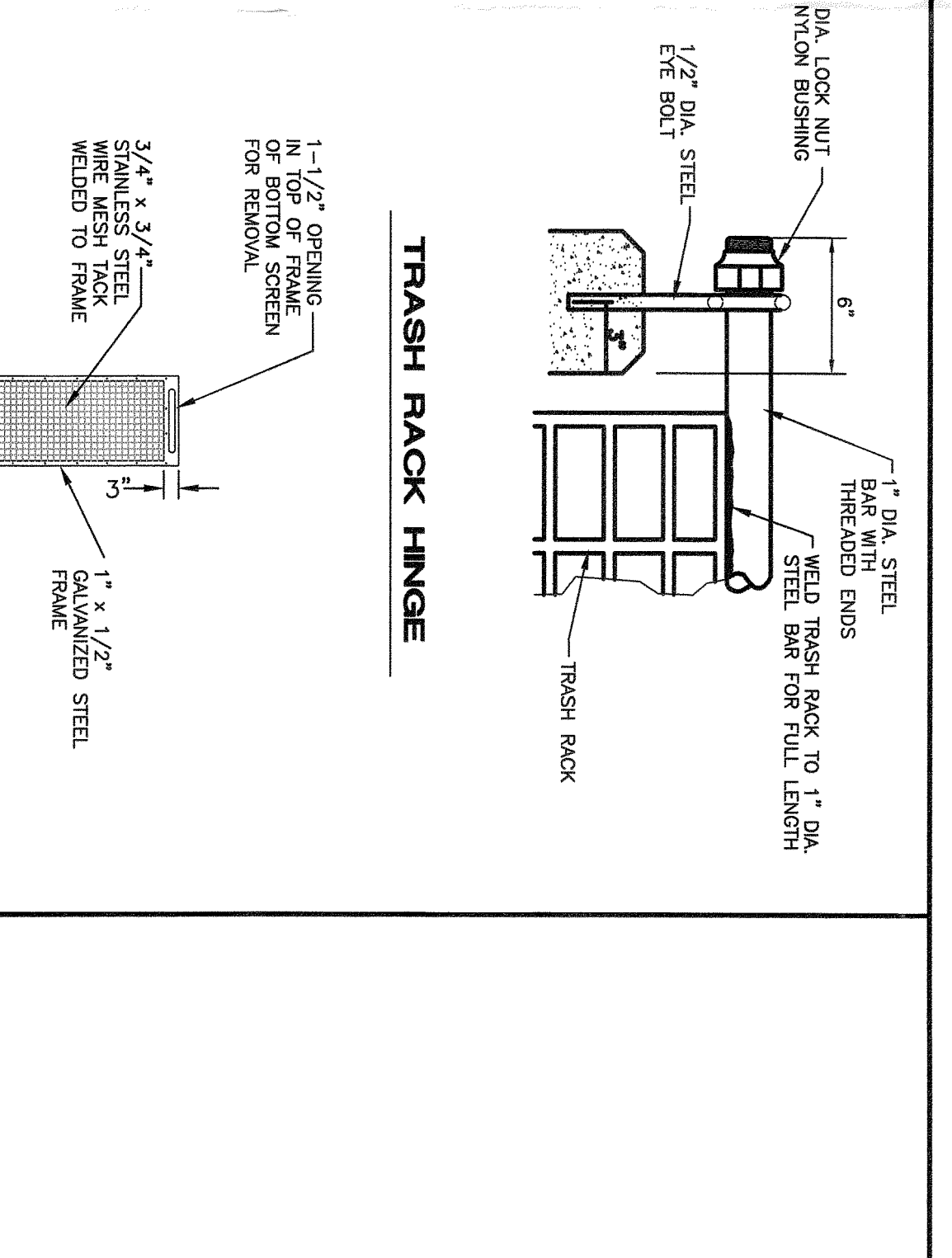
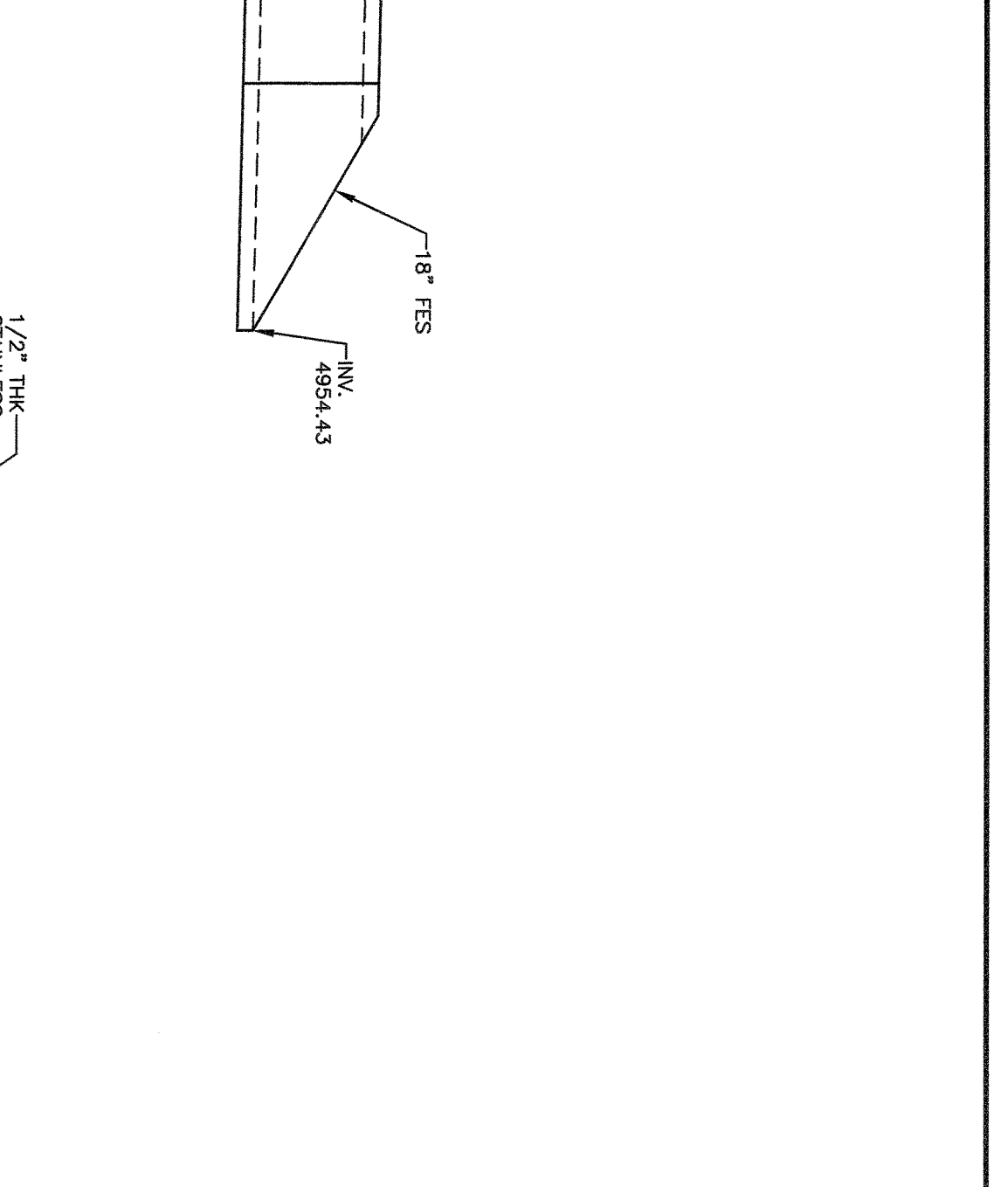
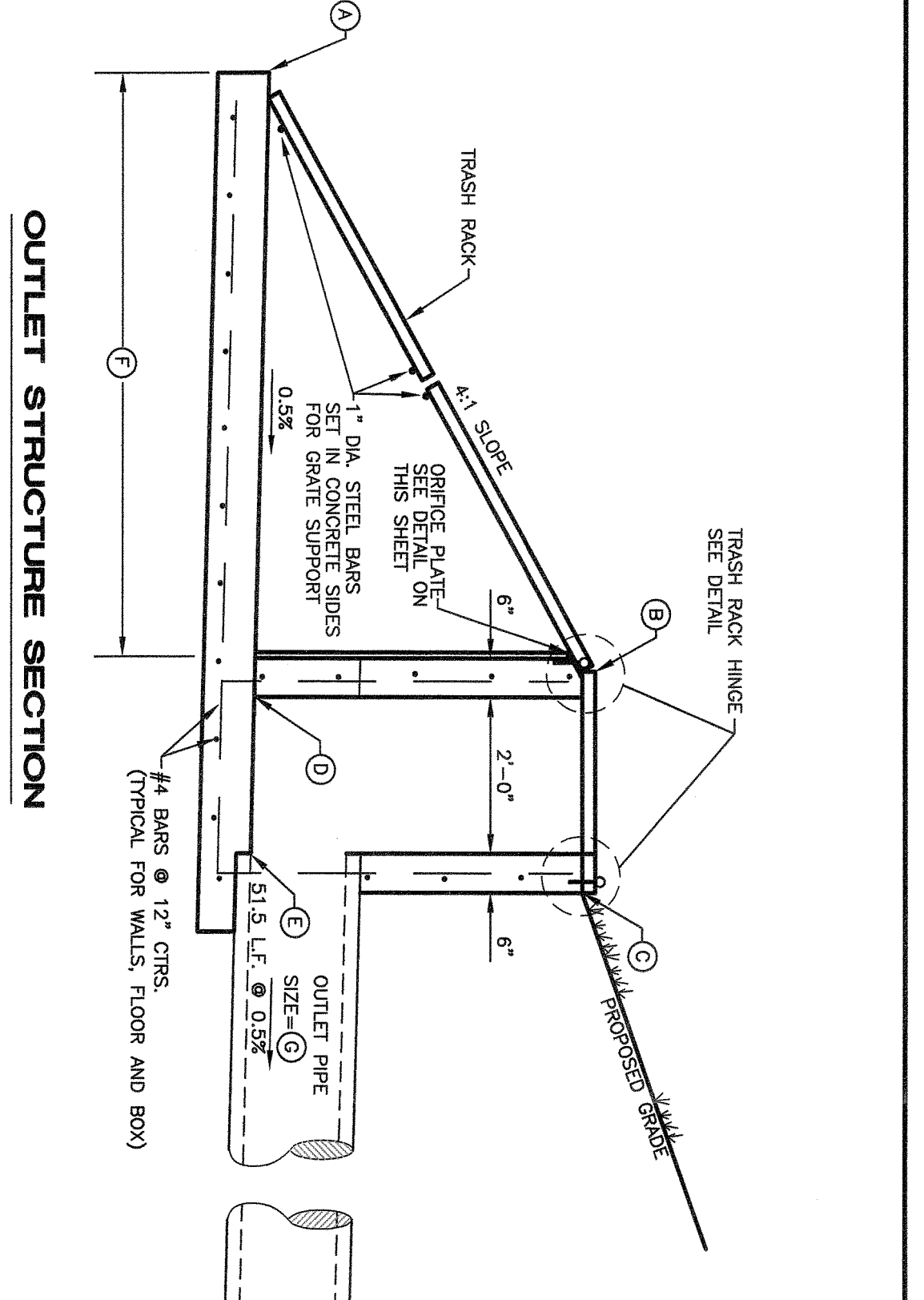
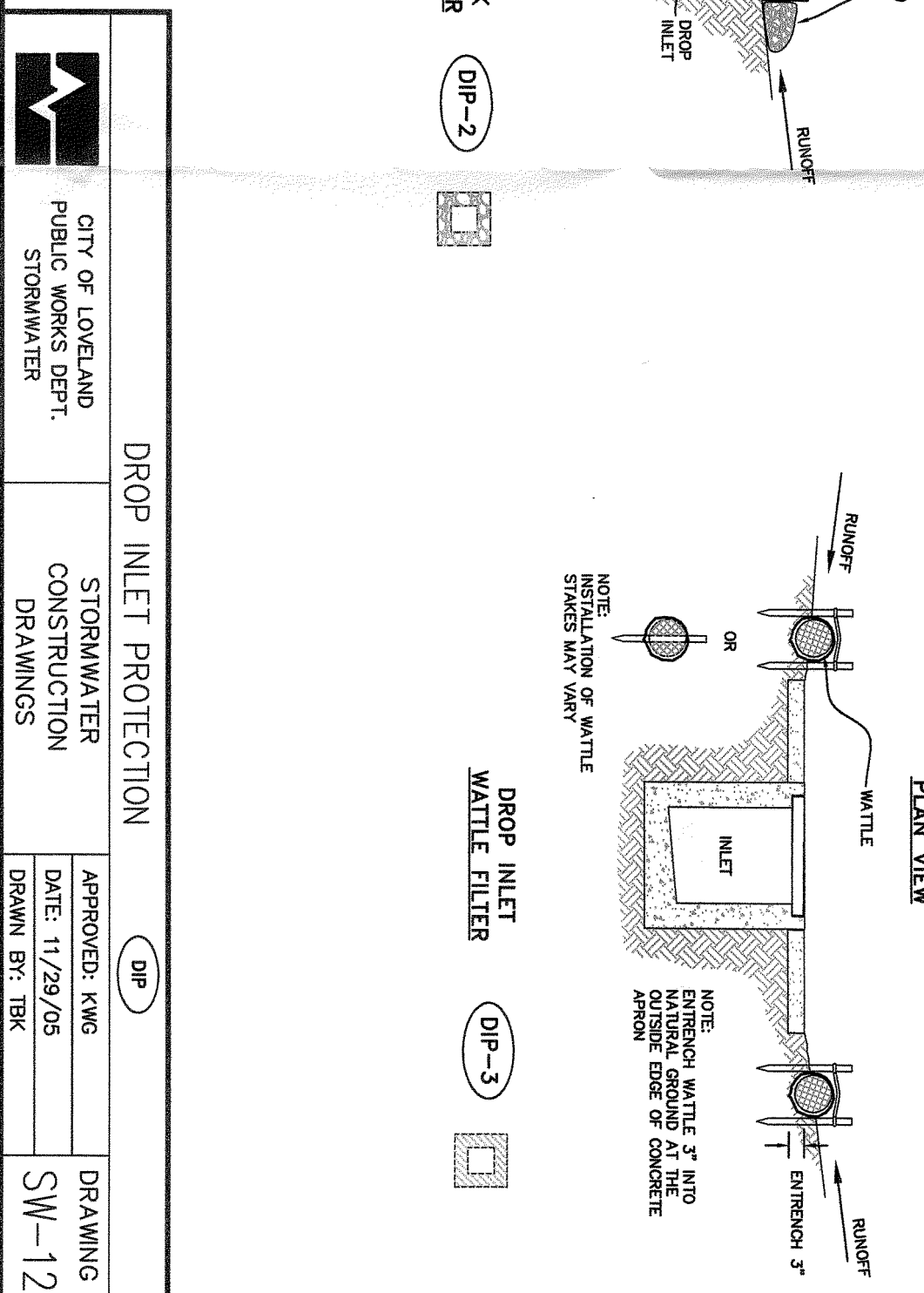
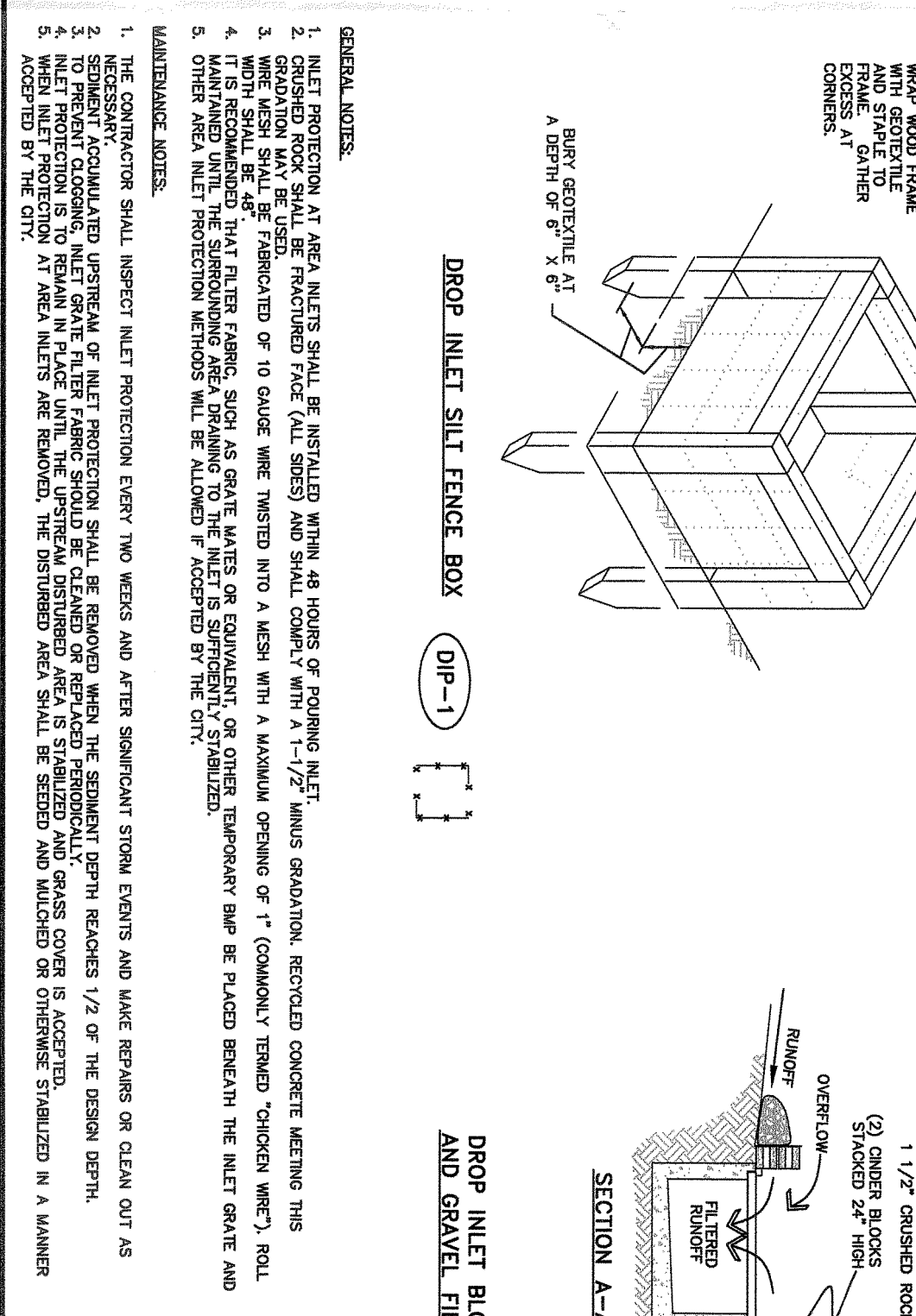
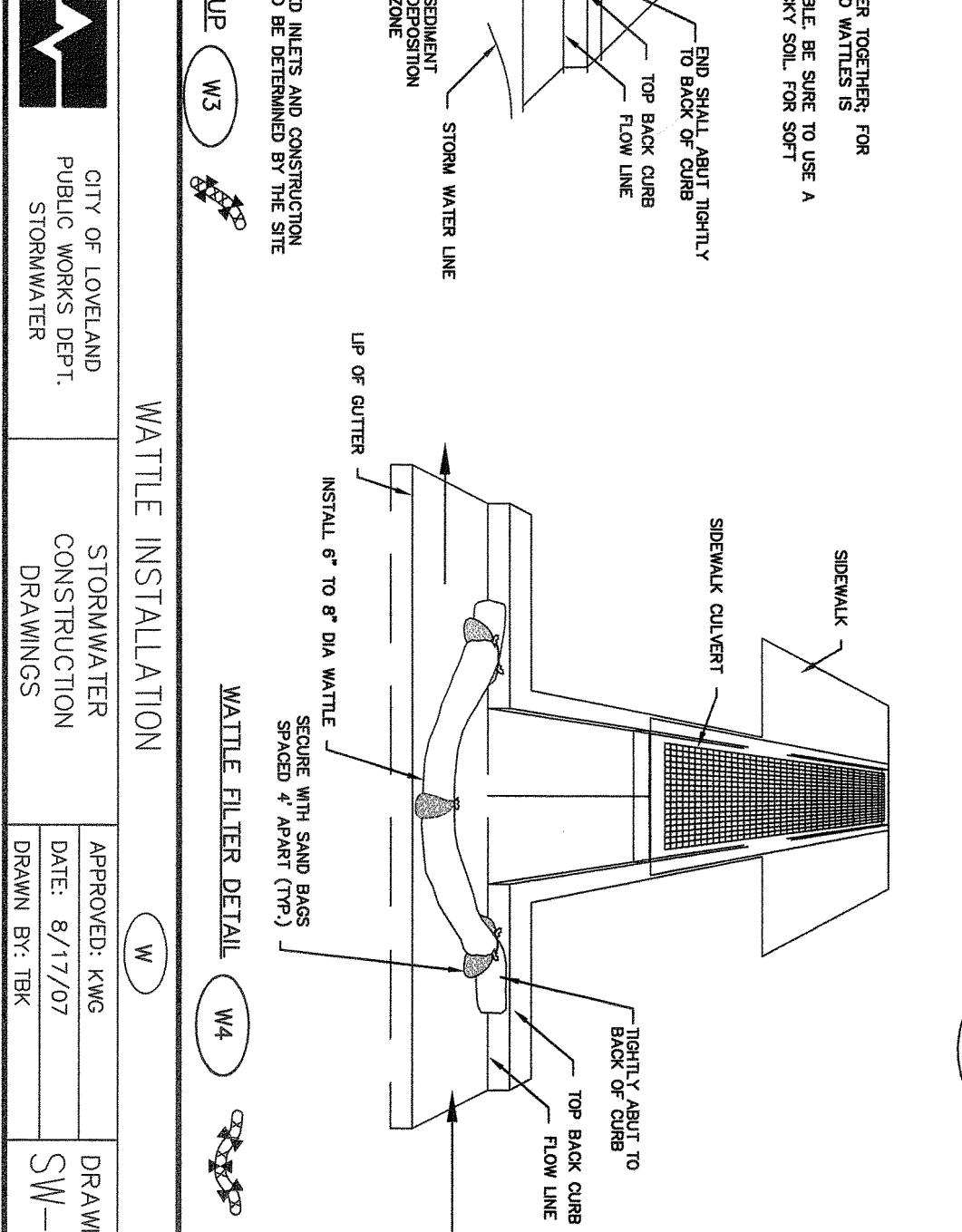
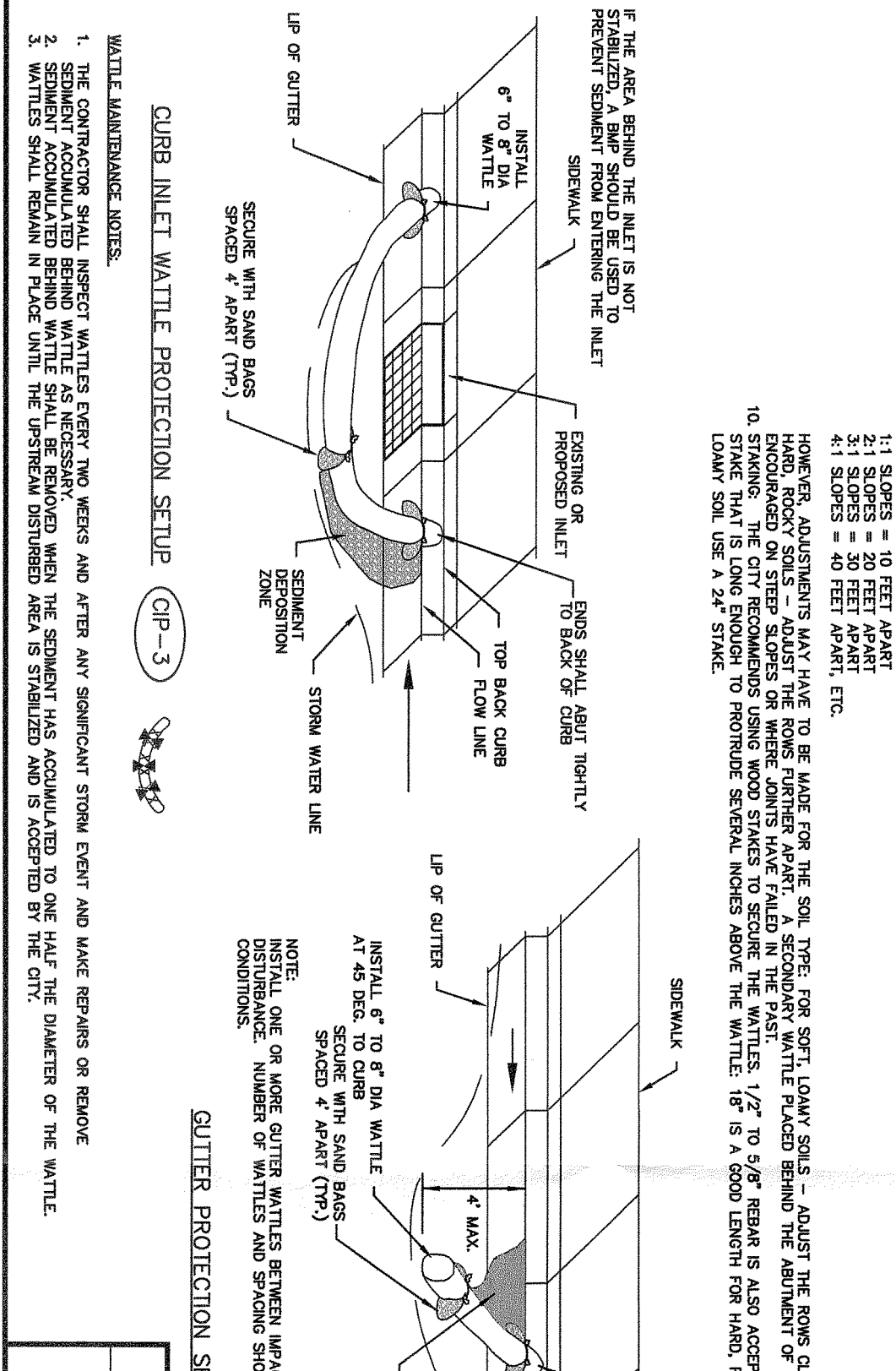
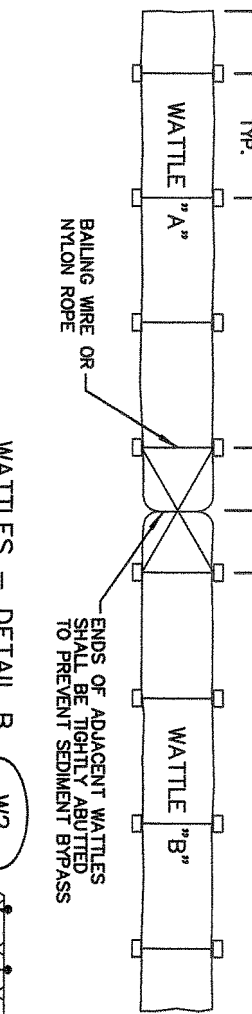
- FOR GRANULAR BEDDING REFER TO THE MAJOR DRAINAGE CHAPTER OF THE URBAN STORM DRAINAGE DESIGN MANUAL VOLUME 1, FOR RIPRAP SPECIFICATIONS.
- FOR PLANTED RIPRAP, RIPRAP SHALL BE COMPACTED BY FULL LAYING OF BROADCAST BENTONITE, AS APPROVED. ANY SOFT, WEEDING OR OTHER MATERIAL SHALL BE REMOVED FROM THE RIPRAP AREA.
- PERCENTAGE OF ROCK EXPOSED AS DIRECTED. COORDINATE ROCK PLACEMENT TO PROVIDE TREE OR SHRUB PLANTING PIT AS INDICATED ON PLANNING PLANS.

**APPROVED:** KING  
**DATE:** 8/17/07  
**DRAWN BY:** TBK

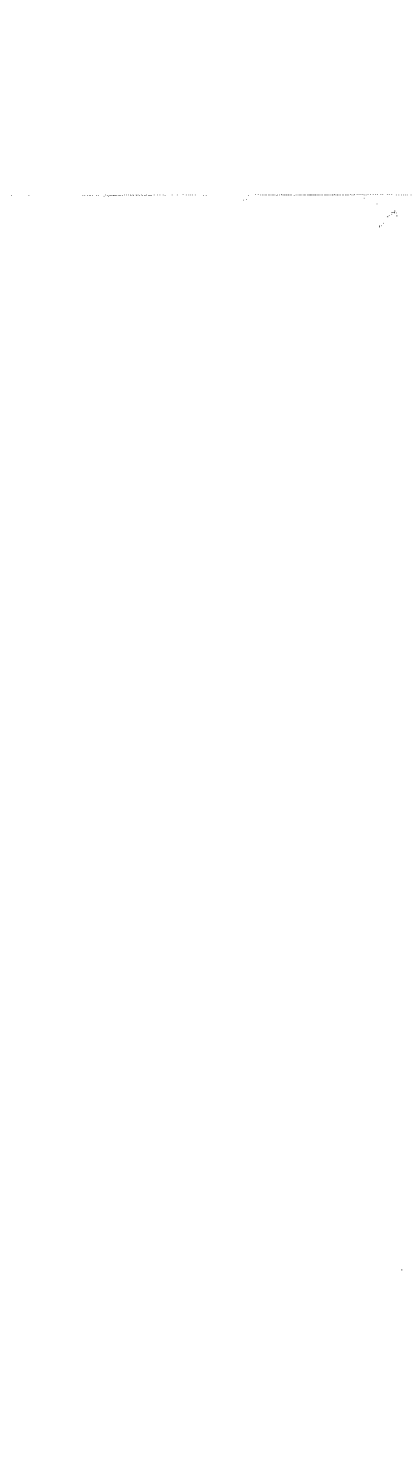
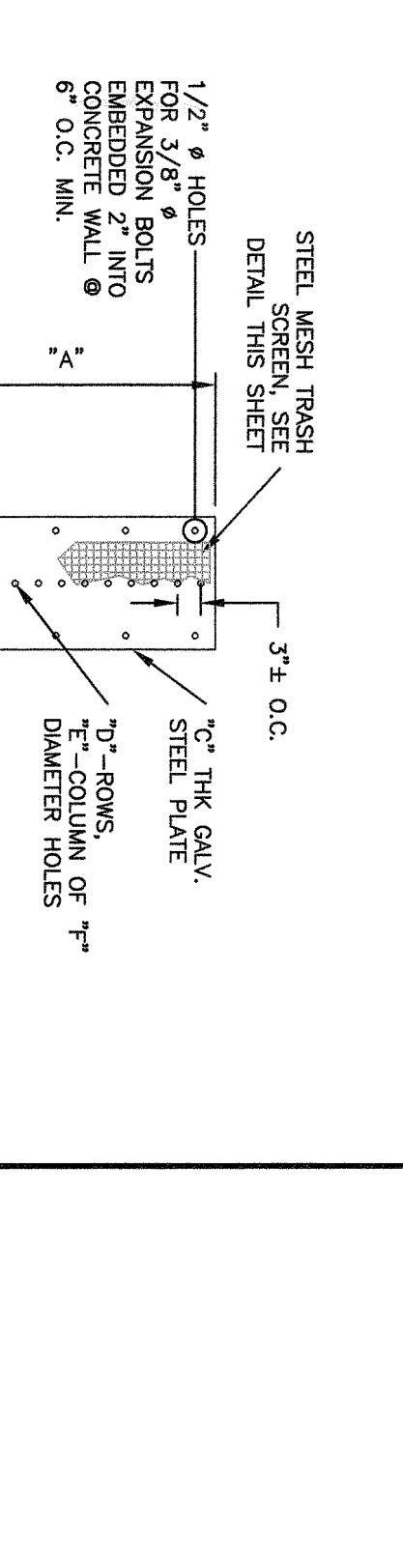
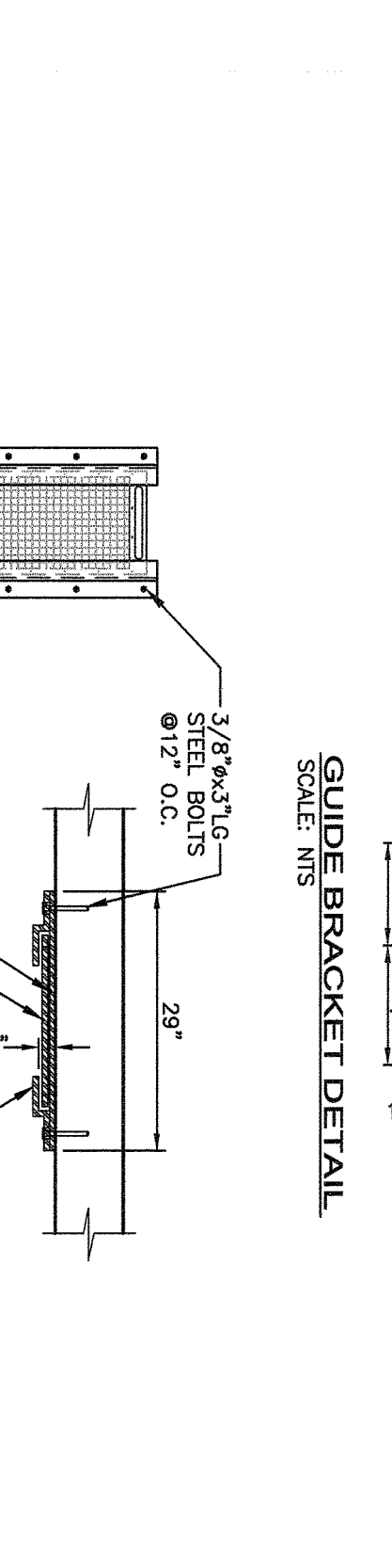
**DETAIL A NOTES:**  
 WHEN INSTALLING REMAINING LENGTHS OF MATTES, BUT THE UP  
 ON THE BOX, STAKE THE MATTES AT EACH END AND FOUR FOOT  
 ON CENTER, FOR EXAMPLE:  
 A 20 FOOT MATTE USES 9 STAKES  
 A 12 FOOT MATTE USES 4 STAKES  
 STAKES SHOULD BE SPACED THE REMAINDER OF THE MATTE  
 STAKES SHOULD BE SPACED 10 FEET TO PICK UP THE  
 MATTE. A MAXIMUM OF 10 FEET SHOULD BE LEFT TO PICK UP THE  
 MATTE. IT MAY BE NECESSARY TO MAKE A HOLE  
 GET THE STAKE THROUGH THE STAKE. WHEN STAKING MATTES  
 STRAIGHT DOWN, WHEN INSTALLING MATTES ON SLOPES, DRIVE  
 THE STAKES PERPENDICULAR TO THE SLOPE. MATTES 12 FT  
 LONG, TOWARD THE FIRST WATTLE IS GOOD TO HELP PUT THEM  
 INTO PLACE. THE REMAINDER OF ROCK STAKES TO BE PLACED  
 INTO PLACE FROM THE STAKE HOLE.



**GENERAL WATTLE INSTALLATION NOTES:**  
 1. THE LOCATION AND LENGTH OF WATTLE IS DEPENDENT ON THE CONDITIONS OF EACH SITE.  
 2. WATTLES SHALL BE MADE OF STRAW, COCOPEAT, OR COCOPEAT FIBER.  
 3. THE WATTLES SHALL BE THICKENED INTO THE GROUND A MINIMUM OF TWO (2) INCHES.  
 4. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 5. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 6. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 7. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 8. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 9. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 10. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 11. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 12. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 13. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 14. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 15. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 16. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 17. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 18. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 19. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 20. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 21. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 22. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 23. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 24. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 25. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 26. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 27. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 28. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 29. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 30. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 31. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 32. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 33. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 34. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 35. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 36. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 37. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 38. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 39. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 40. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 41. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 42. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 43. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 44. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 45. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 46. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 47. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 48. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 49. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 50. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 51. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 52. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 53. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 54. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 55. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 56. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 57. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 58. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 59. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 60. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 61. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 62. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 63. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 64. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 65. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 66. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 67. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 68. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 69. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 70. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 71. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 72. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 73. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 74. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 75. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 76. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 77. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 78. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 79. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 80. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 81. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 82. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 83. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 84. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 85. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 86. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 87. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 88. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 89. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 90. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 91. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 92. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 93. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 94. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 95. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 96. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 97. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 98. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 99. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT  
 100. WATTLES SHALL BE PLACED ON A SLOPE IN ORDER TO PREVENT



POINT	DESCRIPTION	POINT A
A	ELEVATION	4954.75
B	OVERFLOW ELEVATION	4957.45
C	TOP OF BOX ELEVATION	4957.45
D	OUTLET PIPE INV. ELEVATION	4954.70
E	LENGTH (FT)	7'-6"
F	OUTLET PIPE SIZE (IN)	18"
G	HEIGHT OF BOX OPENING (IN)	2.74"
H	WIDTH OF BOX OPENING (IN)	21"
W1	WIDTH OF WQ PLATE (IN)	29"
W2		



WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			

WATTLE INSTALLATION	APPROVED: KING	DATE: 6/17/07	DRAWN BY: TBK
CITY OF LOVELAND STORMWATER CONSTRUCTION DRAWINGS			