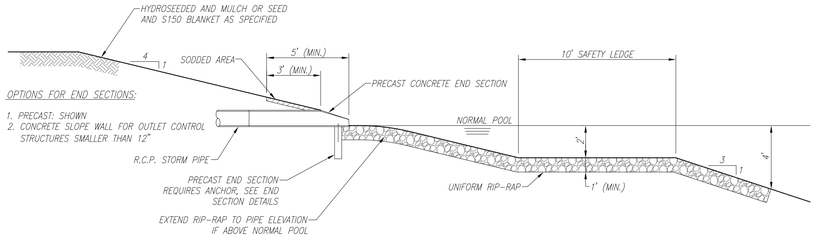
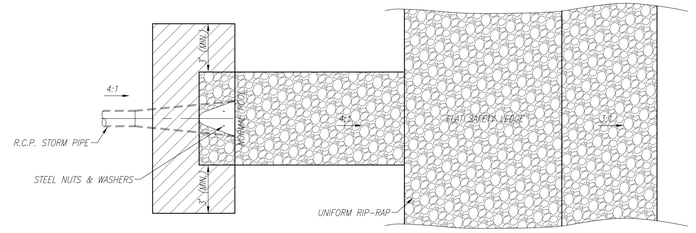
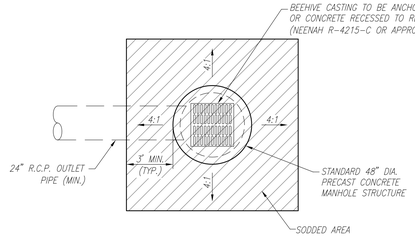
JUNE 2010

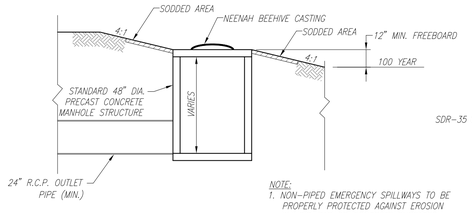




POND OUTLET DETAIL

SCALE: NONE

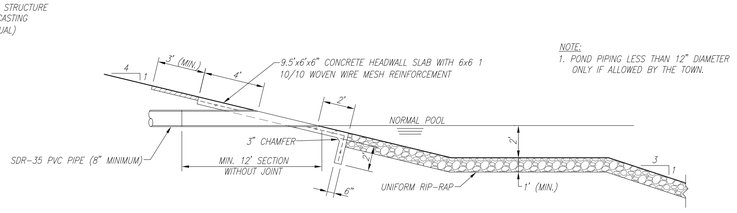




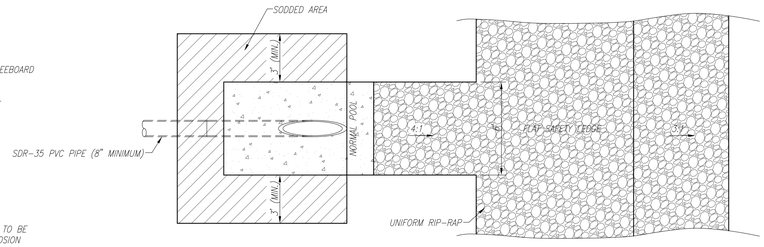
NOTE:
1. NON-PIPED EMERGENCY SPILLWAYS TO BE PROPERLY PROTECTED AGAINST EROSION W/ RIP-RAP OR CONCRETE SURFACES.

EMERGENCY SPILLWAY DETAIL (RETENTION POND)

SCALE: NONE



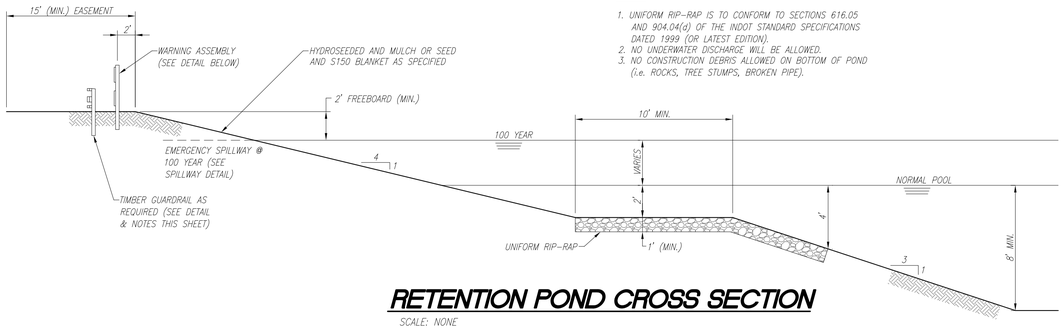
NOTE:
1. POND PIPING LESS THAN 12" DIAMETER ONLY IF ALLOWED BY THE TOWN.



DETAIL FOR OUTLET CONTROL STRUCTURE SMALLER THAN 12" (RETENTION POND)

SCALE: NONE

GENERAL NOTES:
1. BELOW GRADE STORAGE MAY BE ACCEPTABLE WITH PROPER DESIGN AND TOWN APPROVAL.
2. TOWN REPRESENTATIVES HAVE FINAL AUTHORITY BASED ON SAFETY, FUTURE DEVELOPMENT, ETC. TO ALLOW ABOVE GRADE STORAGE.
3. DEVELOPER SHALL BE RESPONSIBLE FOR ESTABLISHING AND ENSURING FUNDING OF AN ENTITY THAT WILL PROVIDE MAINTENANCE OF STORAGE FACILITY.

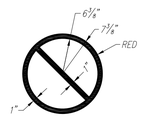


RETENTION POND CROSS SECTION

SCALE: NONE

NOTES:
1. UNIFORM RIP-RAP IS TO CONFORM TO SECTIONS 616.05 AND 904.04(d) OF THE INDOT STANDARD SPECIFICATIONS DATED 1999 (OR LATEST EDITION).
2. NO UNDERWATER DISCHARGE WILL BE ALLOWED.
3. NO CONSTRUCTION DEBRIS ALLOWED ON BOTTOM OF POND (i.e. ROCKS, TREE STUMPS, BROKEN PIPE).

SIGN DETAIL



SIGN NUMBER	CUSTOM
WIDTH x HGHT.	1'-6" x 2'-0"
BORDER WIDTH	0.63"
CORNER RADIUS	1.13"
MOUNTING	GROUND
BACKGROUND	TYPE: REFLECTIVE
	COLOR: WHITE
LEGEND/BORDER & SWIMMER	TYPE: REFLECTIVE
	COLOR: BLACK/BLACK

SYMBOL	X	Y	WID	HT

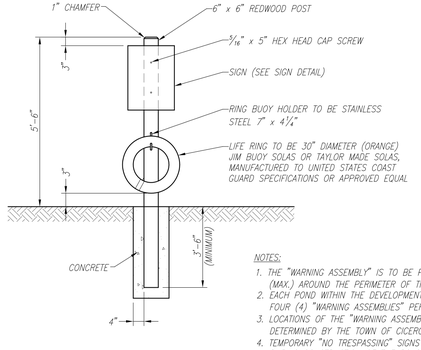
DIMENSIONS ARE IN INCHES.TENTHS LETTER SPACINGS ARE TO START OF NEXT LETTER

LETTER POSITIONS (X)

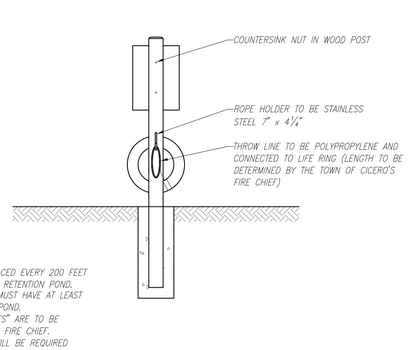
	N	O													D2.5
7	2.3	1.8	7											4	
	S	W	I	M	M	I	N	G		O	R				D1.5
2.3	1.3	1.6	0.6	1.5	1.5	0.6	1.4	1	1.5	1.4	1	2.3		13.4	
	I	C	E		S	K	A	T	I	N	G				D1.5
2.8	0.6	1.3	0.9	1.5	1.4	1.2	1.4	1.2	0.6	1.4	1	2.8		12.4	

CONSTRUCTION NOTES:
1. ALL HOLES DRILLED IN FIELD WHERE SPIKES ARE USED ARE TO BE 1/16" SMALLER THAN SPIKE SIZE.
2. HOLES DRILLED FOR BOLTS ARE TO NE 1/16" LARGER THAN BOLT SIZE.
3. HOLES DRILLED FOR 3/4" LAG BOLTS ARE TO BE 9/16" IN DIAMETER FOR THE TREADED PORTION OF THE BOLT AND 13/16" FOR THE SHANK.
4. ANY NUT OR MACHINE BOLT HEAD IN DIRECT CONTACT WITH TIMBER TO HAVE ONE PLATE WASHER BETWEEN NUT & TIMBER, OR BOLT HEAD & TIMBER.
5. ANT NUT OR MACHINE BOLT HEAD IN DIRECT CONTACT WITH STEEL TO HAVE ONE CUT WASHER BETWEEN NUT & STEEL, OR BOLT HEAD & STEEL.
6. SET THREADS ON ALL BOLTS AT NUT WITH A CENTER PUNCH AFTER TIGHTENING.

SPECIFICATIONS:
1. ALL TIMBER SHALL BE AWPA COPPER NAPHTHENATE TREATED AS PER CURRENT STATE AND/OR AASHTO SPECIFICATIONS.
2. ALL TIMBER TO BE GRADED AS PER NFPA 1991 NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.
3. RAILPOSTS TO BE DOUGLAS-FIR – LARCH No. 1, POST AND TIMBER.
4. 4"x10" & 4"x4" RAILING TO BE DOUGLAS FIR – LARCH, No. 1, S1S. (4"x10"x12'-0" SUPPLIED BY OTHERS).
5. BALANCE OF TIMBER TO BE DOUGLAS-FIR – LARCH, IN ACCORDANCE WITH DESIGN REQUIREMENTS.
6. ALL TIMBER IS ROUGH UNLESS OTHERWISE NOTED.
7. ALL TIMBER CUT OR DRILLED IN FIELD SHALL BE TREATED WITH AN APPROVED PRESERVATIVE.
8. ALL HARDWARE TO MEET ASTM A307-97 AND ALL STRUCTURAL STEEL TO MEET ASTM A36, EXCEPT AS NOTED. ALL TO BE GALVANIZED AS PER CURRENT STATE SPECIFICATIONS AND/OR AASHTO MATERIAL SPECIFICATIONS.
9. ALL TIMBER TO BE CUT TO EXACT LENGTH, DRESSED TO SIZE REQUIRED AND ALL PRACTICAL FRAMING TO BE DONE PRIOR TO TREATMENT.



FRONT

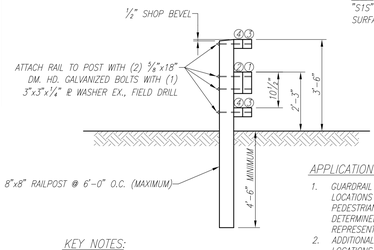


BACK

NOTES:
1. THE "WARNING ASSEMBLY" IS TO BE PLACED EVERY 200 FEET (MAX.) AROUND THE PERIMETER OF THE RETENTION POND.
2. EACH POND WITHIN THE DEVELOPMENT MUST HAVE AT LEAST FOUR (4) "WARNING ASSEMBLIES" PER POND.
3. LOCATIONS OF THE "WARNING ASSEMBLIES" ARE TO BE DETERMINED BY THE TOWN OF CICERO'S FIRE CHIEF.
4. TEMPORARY "NO TRESPASSING" SIGNS WILL BE REQUIRED DURING CONSTRUCTION OF THE PONDS.
5. ALL "WARNING ASSEMBLIES" WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

WARNING ASSEMBLY

SCALE: NONE



NOTE:
"S1S" DESIGNATION STANDS FOR SURFACED ONE (1) SIDE.

KEY NOTES:
① 4"x10" VEHICLE RAIL, S1S
② 4"x10"x0'-8" VEHICLE RAILPOST BLOCK, S1S
③ 4"x4" PEDESTRIAN RAIL, S1S
④ 4"x4"x0'-8" PEDESTRIAN RAILPOST BLOCK, S1S

APPLICATION NOTES:
1. GUARDRAIL TO BE REQUIRED AT ALL LOCATIONS NECESSARY TO PROTECT PEDESTRIANS AND AUTOMOBILE TRAFFIC AS DETERMINED BY THE T.A.C. AND OTHER TOWN REPRESENTATIVES.
2. ADDITIONAL REQUIREMENTS MAY APPLY IN LOCATIONS DEEMED TO BE AN EXTREME HAZARD.
3. GUARDRAIL SHALL ALSO APPLY TO DETENTION PONDS WITH 100-YEAR EVENT WATER LEVELS GREATER THAN 2-FEET AND/OR IF IMMEDIATELY ADJACENT TO ROADWAYS.

TIMBER GUARDRAIL DETAIL

SCALE: NONE

UNITED Consulting
1505 N. Post Road
Indianapolis, Indiana 46219
Phone - (317) 895-2500
Fax - (317) 895-2506
Web - www.united.com

CONSTRUCTION STANDARDS
RETENTION POND DETAILS AND NOTES
TOWN OF CICERO, INDIANA
P.O. BOX 391
CICERO, IN 46034

REVISIONS

Rev. No.	Description	Date

CERTIFIED BY:

Scale: AS NOTED

Sheet: 13 of 17

Date: 8/11/09

File Name:O:\LD02\08-904-10 Cicero - Construction Standards\DWG\RETENTION POND DETAILS AND NOTES.dwg Plot Date:5/11/2010 1:23:50 PM Plotted By:stephens, george