Indiana Brick Corporation

RECEIVED
APR 25 2008
WESTFIELD COMMUNITY
DEVELOPMENT DEPARTMENT

CUSTOM CAST STONE

EXISTING DETENTION POND

NEW 10.60 Ac. TO NORTH OF EXISTING SITE

EXISTING CUSTOM CAST STONE/INDIANA BRICK CORP. 5.03 Ac.

AERIAL PHOTO FROM HAMILTON CO. GIS, DATED 2007
NOT TO SCALE
NORTH IS UP

Indiana Brick Corporation CUSTOM CAST STONE

EXISTING SOUTH ELEVATION FACING 169th STREET

EXISTING NORTH ELEVATION AREA OF PH. 3 BUILDING ADDITION TO CUSTOM CAST STONE

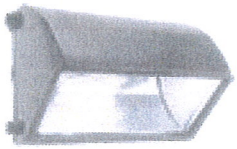
Indiana Brick Corporation CUSTOM CAST STONE

EXISTING EAST ELEVATION (INTERIOR STORAGE YARD)

EXISTING WEST ELEVATION FACING OAK RIDGE ROAD

RAB LIGHTING

WP2CH70



JOB NAME: IN BRICK

DATE:

TYPE: MANDOORS

DESCRIPTION

Wallpack with cutoff glare shield for 70-150W HPS, 70-175W MH or 42W Compact Fluorescent. All aluminum precision die cast construction with tempered glass lens. 30° cutoff strip included. Lamp supplied.

SPECIFICATIONS

Cutoff Lens:
Tempered glass.

Finish:
Chip and fade resistant polyester powder coating.

Housing:
Die cast aluminum, 1/2" NPS tapped holes top, both sides and back for conduit or photocontrol. Hinged refractor frame. Continuous silicone rubber gasket.

Reflector:
Specular anodized aluminum, removable for installation. Symmetrical light pattern maximizes distance between fixtures.

Refractor:
Prismatic optics designed to minimize glare and throw light down and out. Heat resistant borosilicate glass.

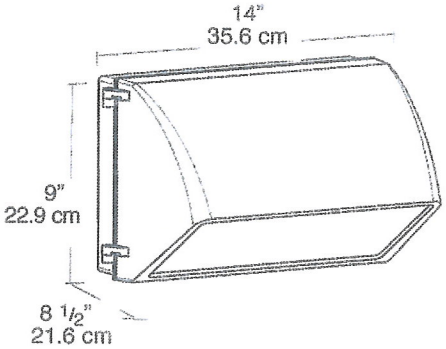
UL Listing:
Suitable for wet locations. HID fixtures can be wired with 90° C supply wiring if supply wires are routed 3" away from ballast.

Patents:
RAB sensor and fixture designs are protected under U.S. and International Intellectual Property laws

Color:
Bronze

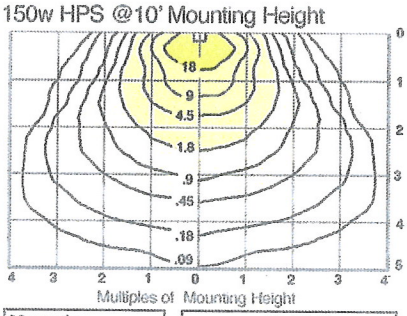
Weight:
14

DIMENSIONS



PHOTOMETRIC

150w HPS @10' Mounting Height



Mounting Height	Multiplier
8'	1.6
10'	1.0
12'	.7
16'	.4
20'	.25

Watts	Multiplier HPS	MH	CFL
175		1.0	
150	1.1	.9	
100	.6	.6	
70	.4	.4	
42			.2

ORDERING INFORMATION

Metal Halide Lamp supplied with fixture	Total Watts	Lamp Type	Lamp Base	Ballast	Starting Amps/ Operating Amps 120V 208V 240V 277V	Input Watts	LAMP ANSI	Initial Lumens	Lamp Hours
	70	ED17	Medium	HX-NPF 120V	2.5/2.1	94	M98	5600	15000

Factory Installed Options
Add suffix to Catalog Number

Tamperproof screws (/TP)
Swivel Photocontrol (/PCS)
Single fusing for 120 and 277 volt (/F)
Double fusing for 208 and 240 volt (/FF)
Button Photocontrol for 208 - 277 volt (/PC2)
Button Photocontrol (/PC)

Note: Specifications may change without notice

RAB Lighting, Inc. • 170 Ludlow Ave• Northvale, NJ 07647 • Tel: 888 RAB-1000 • Fax: 888 RAB-1232 • www.rabweb.com

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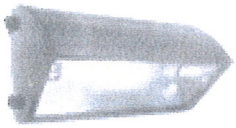
RAB LIGHTING

WP3CH250PSQ



JOB NAME: IN BRICK SHOWROOM

DATE:

TYPE: NORTH, SOUTH, EAST

DESCRIPTION

Large cutoff wallpack for 250 watts HPS or Metal Halide or 120 watts CFL. All aluminum precision die cast construction with tempered glass refractor. Lamp supplied.

SPECIFICATIONS

Finish:
Chip and fade resistant polyester powder coating.

Housing:
Die cast aluminum 1/2" NPS tapped holes top, both sides and back for conduit or photocontrol. Hinged refractor frame, Continuous silicone rubber gasket.

Reflector:
Specular anodized aluminum, removable for installation. Symmetrical light pattern maximizes distance between fixtures.

Color:
Bronze

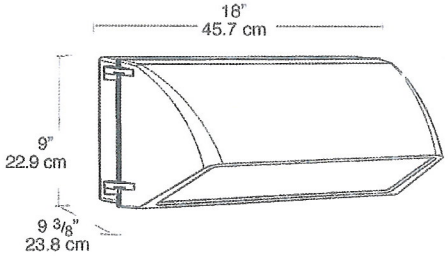
UL Listing:
Suitable for wet locations. HID fixtures can be wired with 90° C supply wiring if supply wires are routed 3" away from the ballast.

Patents:
RAB sensor and fixture designs are protected under U.S. and International Intellectual Property laws

Pulse Start:
Pulse Start metal halide for increased lamp life, lumen maintenance, color uniformity and efficiency

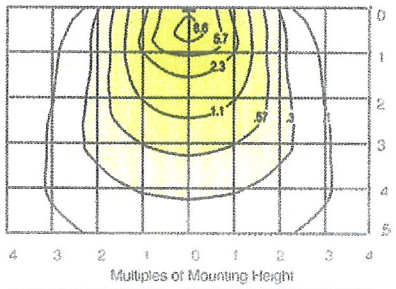
Weight:
25.5

DIMENSIONS



PHOTOMETRIC

250w HPS @ 16' Mounting Height



Mounting Height	Multiplier
8'	4
10'	2.6
12'	1.8
16'	1.0
20'	.6

Watts	Multiplier HPS	MH
200PS		.74
250	1.0	.74
250PS		.88

ORDERING INFORMATION

Metal Halide Lamp supplied with fixture	Total Watts	Lamp Type	Lamp Base	Ballast	Starting Amps/ Operating Amps 120V	208V	240V	277V	Input Watts	LAMP ANSI	Initial Lumens	Lamp Hours
	250	ED28	Mogul	CWA-HPF QT	1.4/2.5	.8/1.2	.7/1.0	.6/1.1	288	M138	25000	15000

Factory Installed Options
Add suffix to Catalog Number

Tamperproof screws (/TP)
Swivel Photocontrol (/PCS)
Single fusing for 120 and 277 volt (/F)
Quartz Restrike (/QR)
Double fusing for 208 and 240 volt (/FF)
Button Photocontrol wired for 208 - 277 volt (/PC2)
Button Photocontrol (/PC)
480 volt ballast (/480)

Note: Specifications may change without notice

RAB Lighting, Inc. • 170 Ludlow Ave• Northvale, NJ 07647 • Tel: 888 RAB-1000 • Fax: 888 RAB-1232 • www.rabweb.com

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MASTER DEVELOPMENT PLAN

FOR

INDIANA BRICK / CUSTOM CAST STONE

OAKRIDGE ROAD / 169th STREET
WESTFIELD, INDIANA

CONTACTS

HAMILTON CO. SURVEYORS OFFICE

ONE HAMILTON SQUARE
NOBLESVILLE, INDIANA 46060
(317) 776-8495

WESTFIELD PUBLIC WORKS

UTILITY OFFICE
2706 EAST 171st STREET
WESTFIELD, INDIANA 46074
(317) 896-5452

VERIZON

20905 HAGUE ROAD
NOBLESVILLE, INDIANA 46060
(317) 984-2334

CINERGY

100 SOUTH MILL CREEK ROAD
NOBLESVILLE, INDIANA 46060
(317) 776-5331

CITY OF WESTFIELD
DEPT. OF COMMUNITY DEVELOPMENT

PERMIT COMPLIANCE / INSPECTION SERVICES
CITY HALL
WESTFIELD, INDIANA 46074
(317) 896-5577

INSIGHT CABLEVISION

PERMIT COMPLIANCE / INSPECTION SERVICES
15229 STONEY CREEK WAY
NOBLESVILLE, INDIANA 46060
(317) 776-0660

CITIZENS GAS OF WESTFIELD

2020 N. MERIDIAN
INDIANAPOLIS, INDIANA 46204
(317) 927-4430

IN DEPT. OF ENVIR. MANAGEMENT

OFFICE OF WATER MANAGEMENT, STORMWATER GROUP
100 NORTH SENATE AVENUE P.O. BOX 6015
INDIANAPOLIS, INDIANA 46206-6015
(317) 233-1864

LEGAL DESCRIPTION
INDIANA BRICK CORPORATION
CORPORATE WARRANTY DEED
INSTRUMENT No. 9541211

A part of the northwest quarter of the southwest quarter of Section 1, Township 18 North, Range 3 East in Washington Township, Hamilton County, Indiana, more particularly described as follows:

Beginning at a northwest corner of the Southwest quarter of Section 1, Township 18 North, Range 3 East, thence north 86 degrees 34 minutes 58 seconds east along the north line of said quarter 574.65 feet, thence south 00 degrees 18 minutes 18 seconds east 808.68 feet, thence south 87 degrees 50 minutes 20 seconds west 578.34 feet to a point on the west line of said quarter, thence north 00 degrees 00 minutes 00 seconds (assumed bearing) along said west line 796.23 feet to the point of beginning and containing 10.608 acres, subject to all legal easements and rights of way of record.

LEGAL DESCRIPTION
CUSTOM CAST STONE
INSTRUMENT No. 89-18154

Part of the Northwest Quarter of the Southwest Quarter of Section 1, Township 18 North, Range 3 East, in Washington Township, in Hamilton County, Indiana, and being more particularly described as follows:

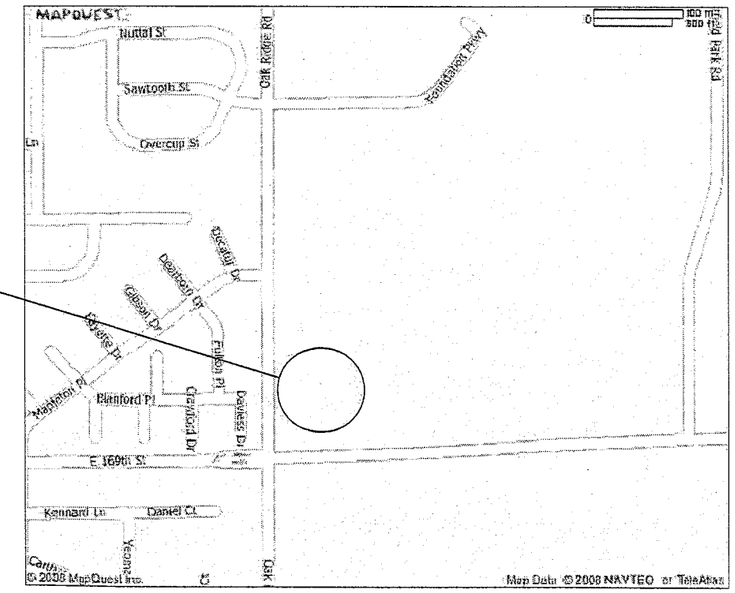
Beginning at the Southwest corner of said Quarter-Quarter Section; thence North 0 degrees 00 minutes 00 seconds East (assumed basis of bearing) along the West line of said Quarter-Quarter Section, 521.37 feet to a point 796.23 feet South of the Northwest corner of said Quarter-Quarter Section; thence North 87 degrees 50 minutes 20 seconds East 578.34 feet; thence South 0 degrees 18 minutes 18 seconds East 515.37 feet to the South line of said Quarter-Quarter Section; thence South 87 degrees 15 minutes 25 seconds West along said South line, 581.35 feet to the point of beginning.

SHEET INDEX

C1 PROPOSED SITE PLAN
C2 EXISTING TOPOGRAPHY PLAN
C3 GRADING \ DRAINAGE PLAN
C4 EROSION CONTROL PLAN
C5 WESTFIELD DETAILS
C6 SITE and DRAINAGE DETAILS
C7 STORMWATER POLLUTION PREVENTION NOTES

L1 LANDSCAPING / EXTERIOR LIGHTING PLAN

SITE



VICINITY MAP
NOT TO SCALE

ISSUE

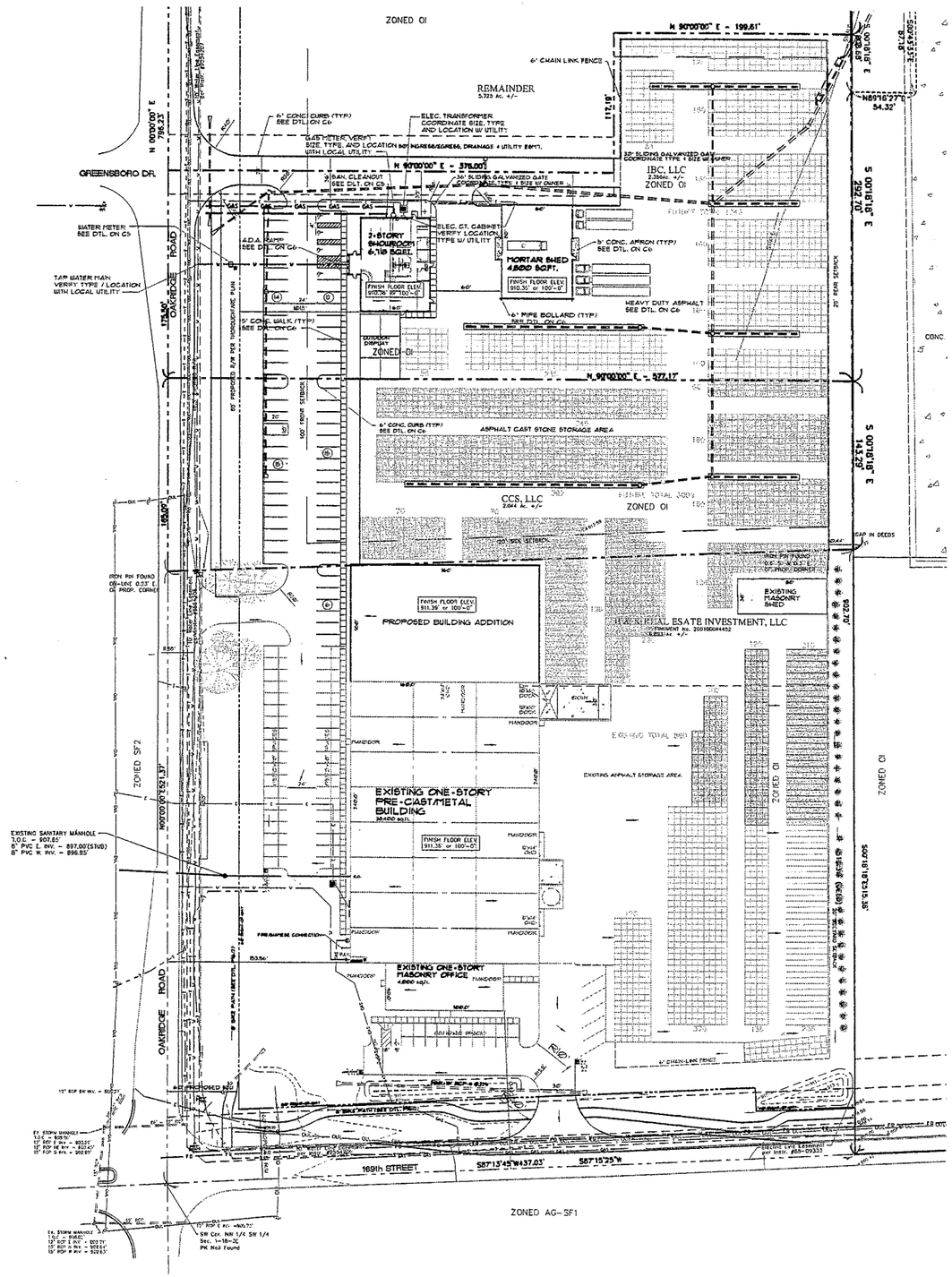
DATE	FOR
4-08-08	WESTFIELD T.A.C.

KEELER-WEBB ASSOCIATES
Consulting Engineers-Planners-Surveyors
486 GRADLE DRIVE
CARMEL, INDIANA 46032
PHONE (317) 574-0140
E-mail: info@keelerwebb.com
FAX (317) 574-1269

CUSTOM CAST STONE
734 EAST 169TH STREET
WESTFIELD, INDIANA 46074

COVER SHEET
NEW BUILDING FOR INDIANA BRICK
OAKRIDGE ROAD
WESTFIELD, INDIANA

DRAWN BY: CPW
CHECKED BY: ALD
PROJECT No. 0802-031
SHEET No. COV



SITE NOTES

1. Site information was taken from Keeler-Webb Ass., dated 2-28-07. It is the contractor's responsibility to verify existing site conditions prior to starting work.

2. The contractor shall be responsible for obtaining or verifying that all permits and approvals are obtained from the respective city, county, and /or state agencies prior to starting construction.

3. The Plumbing contractor shall consult with the Local Water Company, provide all materials and labor, and pay all costs not borne by the Local Water Company to provide any new water service.

4. The Plumbing contractor shall consult with the Local Gas Company, provide all materials and labor, and pay all costs not borne by the Local Gas Company to provide any new gas service.

5. The Electrical Contractor shall consult with the Local Power Company, provide all materials and labor, and pay all costs and fees not borne by the Local Power Company to provide any new underground electrical service.

6. The Electrical Contractor shall consult with the Local Telephone Company, and shall provide all labor and materials required which are not borne by the Telephone Company to provide any new telephone service.

7. Underground water main extension service shall be AWWA C900 PVC or Ductile Iron. Domestic water lateral service shall be Type 'K' Copper. (or approved equal per local water company).

8. The incoming water service shall be installed with a minimum of 54" of cover.

9. All utility service lines shall be constructed in accordance with all the latest applicable codes and to each utility's and/or city's standards.

10. Use compacted granular fill when utility lines are placed under walks and driveways.

11. Soil borings have not been performed at this time. Pavement design is based on an assumed soil bearing pressure of 1500 p.s.f.

12. Provide sleeves for mechanical work as required.

13. Notify Engineer at least 1 day (24 hours) prior to placing any concrete.

14. Areas between curbing, sidewalks, paving and building shall be filled with 4" of topsoil suitable for landscaping.

15. See sheet C2 for exterior concrete specifications.

16. See this sheet for sanitary sewer lateral specifications and requirements.

17. This structure shall comply with A.D.A. 1991.

18. All edge of pavement radii are 5 feet unless otherwise noted.

19. If active utilities are encountered but not shown on the drawings, the engineer shall be advised before work is continued.

20. Inactive and abandoned utilities encountered in excavating and grading operations shall be reported to the engineer. They shall be removed, plugged or capped as directed by the utility company and the engineer.

21. Contractor to install knox-box at a location adjacent to mech/sprinkler room. Coordinate location, type and style with Carmel Fire Department.

22. Site data:

SITE DATA

Zoned	EI
Lot area	1.414 Ac. +/-
Building area	8,800 sq. ft.
Impervious Area	33% of site
Minimum Front Yard Setback	100'
Minimum Rear Yard Setback	20'
Minimum Side Yard Setback	20'

EXISTING LEGEND

- EXISTING WATER LINE
- 6' WOVEN-WIRE FENCE
- 6' RAIL & POST FENCE
- UNDERGROUND TELEPHONE
- EASEMENT
- SETBACK LINE
- CENTERLINE
- UNDERGROUND GAS MAIN
- UNDERGROUND TELECOMMUNICATIONS
- PROPERTY or R/W LINE
- UNDERGROUND ELECTRIC LINE
- SANITARY SEWER
- EXISTING STORM SEWER
- CURB INLET
- 8"x8" AMERITECH PHONE PEDESTAL
- CINERGY ELECTRIC BOX
- STREET SIGN
- GAS VALVE
- EXISTING CONTOUR
- VEGETATION
- SANITARY MANHOLE
- EXISTING IRON PIN FOUND
- EXISTING CATCH BASIN
- EXISTING WATER VALVE

PROPOSED LEGEND

- 6" CONCRETE CURB
- PROPOSED SANITARY SEWER
- FLOW LINE OF SWALE
- SUBDIVISION BOUNDARY
- ADJOINER PROPERTY LINE
- PROPOSED STORM SEWER
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED UNDERGROUND GAS
- PROPOSED UNDERGROUND WATER
- FLOW ARROW
- 762.5 PROPOSED GRADE
- ADA SPACE
- HEAVY-DUTY ASPHALT PAVEMENT
- LIGHT-DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT

PROPOSED SITE PLAN

GRAPHIC SCALE

0 50 75 100 150 200

(IN FEET)
1 inch = 50 ft.

NORTH

ISSUE		
DATE	FOR	
4-08-08	WESTFIELD T.A.C.	

KEELER-WEBB ASSOCIATES
Consulting Engineers–Planners–Surveyors
485 GRADLE DRIVE CARMEL, INDIANA 46032
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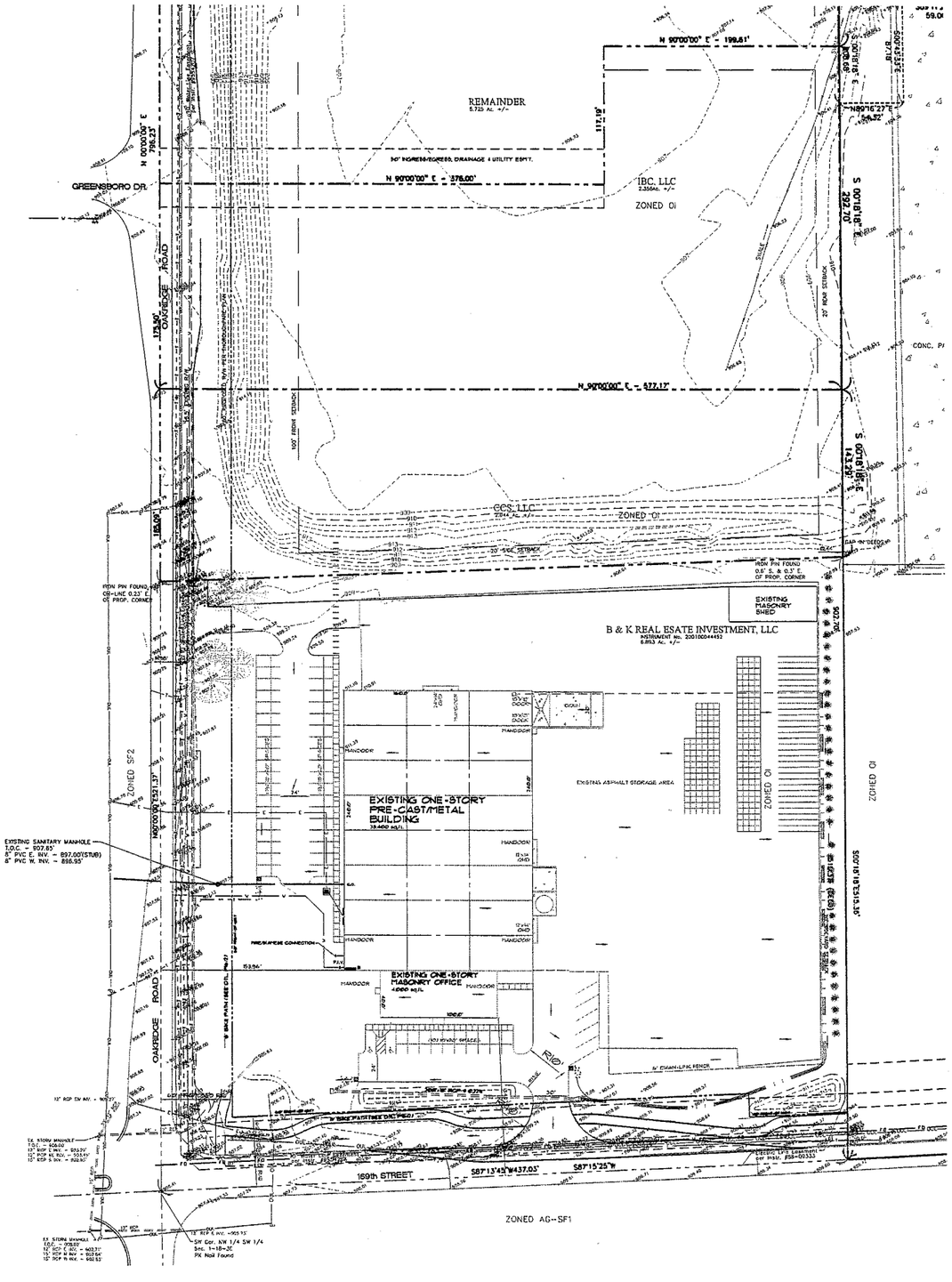
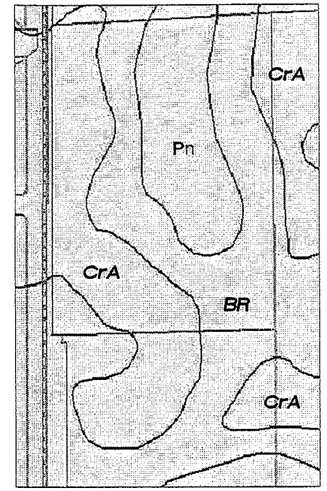
CUSTOM CAST STONE
734 EAST 169TH STREET
WESTFIELD, INDIANA 46074

PROPOSED SITE PLAN
NEW BUILDING FOR INDIANA BRICK
OAKRIDGE ROAD
WESTFIELD, INDIANA

DRAWN BY: CPW
CHECKED BY: ALD
PROJECT No.

SHEET No.
C1





SOILS MAP

SYMBOL	SOIL NAME	SOIL TYPE	SLOPE
CrA	CROSBY	SILT LOAM	0-3%
BR	BROOKSTON	SILTY CLAY LOAM	0-3%
Pn	PATTON	SILTY CLAY LOAM	0-2%

SOIL NOTES

1. BROOKSTON SILTY CLAY LOAM – this soil is dark colored, silty in texture and on depressional uplands. It is deep and poorly drained with moderate permiability. There is a high availability of water for plant growth along with a high organic content. Compact till starts at a depth of 40-60 inches. The main features which affect urban development uses are seasonal high water table, high potential for frost heave, moderate shrink-swell potential, moderate permiability, and can have ponding surface water.

2. CROSBY SILT LOAM – This soil has 0-3 percent slopes. This soil is lightly colored, silty in texture and on sloping uplands. It is deep and somewhat poorly drained with slow permiability. There is a high availability of water for plant growth along and a medium organic content. Compact till starts at a depth of 20-40 inches. The main features which affect urban development uses are seasonal high water table, high potential for frost heave, moderate shrink-swell potential, and slow permiability.

3. PATTON SILTY CLAY LOAM – Patton soils are on nearly level to depressional parts of stream terraces and glacial lake plains. Slopes are level or slightly concave with gradients of 0 to 2 percent. Patton soils formed in medium textured and moderately fine textured glaciolacustrine deposits and typically are underlain by stratified silty and loamy outwash sediments of Wisconsinan Age. Mean annual air temperature ranges from 52 to 57 degrees F., and mean annual precipitation ranges from 35 to 48 inches.

This site will have to constructed to the requirements set by the Town of Westfield, Hamilton County Surveyors Office and the Hamilton County Soil & Water. There standards require that the site be drained with an on-site storm drainage system and the finish floor elevation of the structures be place at a minimum elevation of 2 feet above the 100-year pool elevation of the adjacent retention ponds. The structures foundation shall have spreadfootings at the column locations, grade beams around the perimeter, and slabs on grade. The structural construction documents address the design of these foundations in relation to the existing soils on the site. All paved areas shall have an adequate sub-base based on these construction documents and the soils report. This site is serviced by the Town of Westfield for sanitary sewer service and domestic water service, therefore, there are no proposed wells or septic fields planned for this project.

EXISTING LEGEND

- EXISTING WATER LINE
- 6' WOVEN-WIRE FENCE
- 6' RAIL & POST FENCE
- UNDERGROUND TELEPHONE
- EASEMENT
- SETBACK LINE
- CENTERLINE
- UNDERGROUND GAS MAIN
- UNDERGROUND TELECOMMUNICATIONS
- PROPERTY or R/W LINE
- UNDERGROUND ELECTRIC LINE
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- EXISTING STORM SEWER
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- STREET SIGN
- GAS VALVE
- EXISTING CONTOUR
- VEGETATION
- SANITARY MANHOLE
- EXISTING BUSH
- EXISTING IRON PIN FOUND
- EXISTING CATCH BASIN
- EXISTING WATER VALVE

CONCRETE NOTES

1. ACI 318, "Building Code Requirements for Reinforce Concrete"; comply with applicable provisions except as otherwise indicated.

2. Employ acceptable testing laboratory to perform materials evaluation, testing and design of concrete mixes.

3. Perform sampling and testing during concrete placement, as follows:

Air content ASTM C 173, one for each set of compressive strength specimens, 6% minimum on all concrete exposed to freezing or thawing.

Compressive strength ASTM C 39, one set of each 50 cu. yds. or fraction thereof each class of concrete; one specimen tested at 7 days, one specimen tested at 28 days, and one retained for later testing if required.

When the total quantity of given class of concrete is less than 50 cu. yds. strength tests may be waived by Engineer if field experience indicates evidence of satisfactory strength.

Test results will be reported in writing to Engineer or general contractor. Contact the Concrete Producer within 24 hours after tests are made.

4. Concrete for pavement, foundation, slabs, walks, patios, and curbs shall have a 28 day compressive strength of not less than 4,000 psi for all exterior poured concrete.

5. Mix design may be adjusted when material characteristics, job conditions, weather, test results or other circumstances warrant. Do not use revised concrete mixes until submitted to and accepted by Engineer.

6. Portland Cement ASTM C 150, Type as required.

7. ASTM C 33, except local aggregates of proven durability may be used when acceptable to Engineer. Used evenly mixed sizes of aggregate up to ½" minimum size.

8. Water: Drinkable

9. Air-Entraining Admixture: ASTM C 260.

10. Water-Reducing Admixture: ASTM C 494; type as required to suit project conditions. Only use admixtures which have been tested and accepted in mix designs.

11. Provide form materials with sufficient stability to withstand pressure of placed concrete without bow or deflection.

12. Deformed Reinforcing Bars: ASTM A 615, Grade 60, unless otherwise indicated.

13. Welded Wire Fabric: ASTM A 185.

14. Job Site Mixing: Use drum type batch machine mixer, mixing not less than 1-1/2 minutes for one cu. yd. or small capacity. Increase mixing time at least 15 seconds for each addition cu. yd. or fraction thereof.

15. Ready Mix Concrete: ASTM C 94

16. Construct formwork so that concrete members and structures are of correct size, shape, alignment, elevation and position.

17. Clean and adjust forms prior to concrete placement. Apply form release agents or wet forms as required. Retighten forms during concrete placement if required to eliminate leaks.

18. Satisfactory soil material shall be free of clay, rock or gravel larger than 2" in any dimension, debris, waste, frozen material vegetable and other deleterious organic matter. Soil shall consist of nonorganic, low plastic (PI 20) material.

19. Sub-base material shall be naturally or artificially grade mixture of natural or crushed gravel, crushed stone, crushed slag, natural or crushed sand.

20. Barricade open excavations occurring as part of this work and post with warning lights.

21. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

22. Form concrete such that favorable drainage occurs to storm drains, stairwell drains, and/or parking lots. No drainage should occur towards the foundation of building walls.

23. Minimum concrete cover shall be 3" for reinforcing steel in accordance with (ACI 318-83).

24. Center all footings on wall pier or column above unless otherwise noted.

25. Reinforcement in grade beams shall be continuous. Horizontal overlap splices shall be a minimum of 24".

26. Provide corner bars at all concrete grade beam corners to be overlapped with the outside face horizontal bars. Corner bars are to match the outside face horizontal bars in size, grade, and spacing.

27. Pier reinforcement shall be doweled to the footings. Provide dowels equal in size, number and grade to the pier reinforcement. Dowels shall be over-lapped with the pier footing dowels and have a full compression lap splice with the wall steel.

28. Welding, including tack welding, of reinforced steel is prohibited. Welding of reinforcing steel will be permitted only by written approval of the Engineer.

29. See Structural drawings for locations of anchor bolts, chamfers, and other details not shown on the structural drawings.

30. Footings shall bear on undisturbed material. Any unsuitable material shall be removed. All footing excavations shall be inspected by an independent soils engineer at direction of general contractor before concrete is placed.

31. Soils exposed in the bases of all satisfactory foundation excavations shall be protected against any detrimental change in conditions such as disturbance, rain or freezing. Surface runoff shall not be allowed to enter the excavation.

32. Provide construction, isolation and control joints as indicated on civil or structural sheets.

33. All exterior concrete shall be finished with a light broom finish except for floor slabs which shall have a steel trowel finish per notes and details on structural or architectural sheets.

34. The contractor shall provide specifications and manufacturers data for concrete sealer, joint filler, and curing compound for all floor slabs, to the Engineer prior to installation for approval.

35. All soft, yielding or other unsuitable materials encountered during any phase of subgrade construction shall be removed and replaced with suitable material. The replacement material shall fill the unstable area for the entire depth of the compacted subgrade and meet the subgrade compactions requirements. The subgrade shall be shaped to the true lines and grade as shown on the plans.

36. The subgrade shall be compacted to 95% laboratory density as determined by AASHTO Method T-99.

37. The subgrade and finish paving shall be tested by an approved testing company at the direction of the general contractor for uniform smoothness, density and grade.

BENCHMARK

RAILROAD SPIKE SET IN NORTH SIDE OF UTILITY POLE. SET BY HAHN SURVEYING GROUP RUN IN FROM RM 22. A CHISELED SQUARE LOCATED ON HEADWALL OF CULVERT ON HEADWALL OF CULVERT UNDER U.S. 31 (FROM FIRM).

ELEV. = 908.20'
COND. - GOOD

EXISTING TOPOGRAPHY

GRAPHIC SCALE

0 50 75 100 150 250

(IN FEET)
1 inch = 50 ft.

ISSUE	FOR
DATE	WESTFIELD T.A.C.
1-08-08	

KEELER-WEBB ASSOCIATES
Consulting Engineers-Planners-Surveyors
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E-mail: info@keelerwebb.com
FAX (317) 574-1289

CUSTOM CAST STONE
734 EAST 169TH STREET
WESTFIELD, INDIANA 46074

EXISTING TOPOGRAPHY
NEW BUILDING FOR
INDIANA BRICK
OAKRIDGE ROAD
WESTFIELD, INDIANA

DRAWN BY: CPW
CHECKED BY: ALD

PROJECT No.
0802-031

SHEET No.
C2

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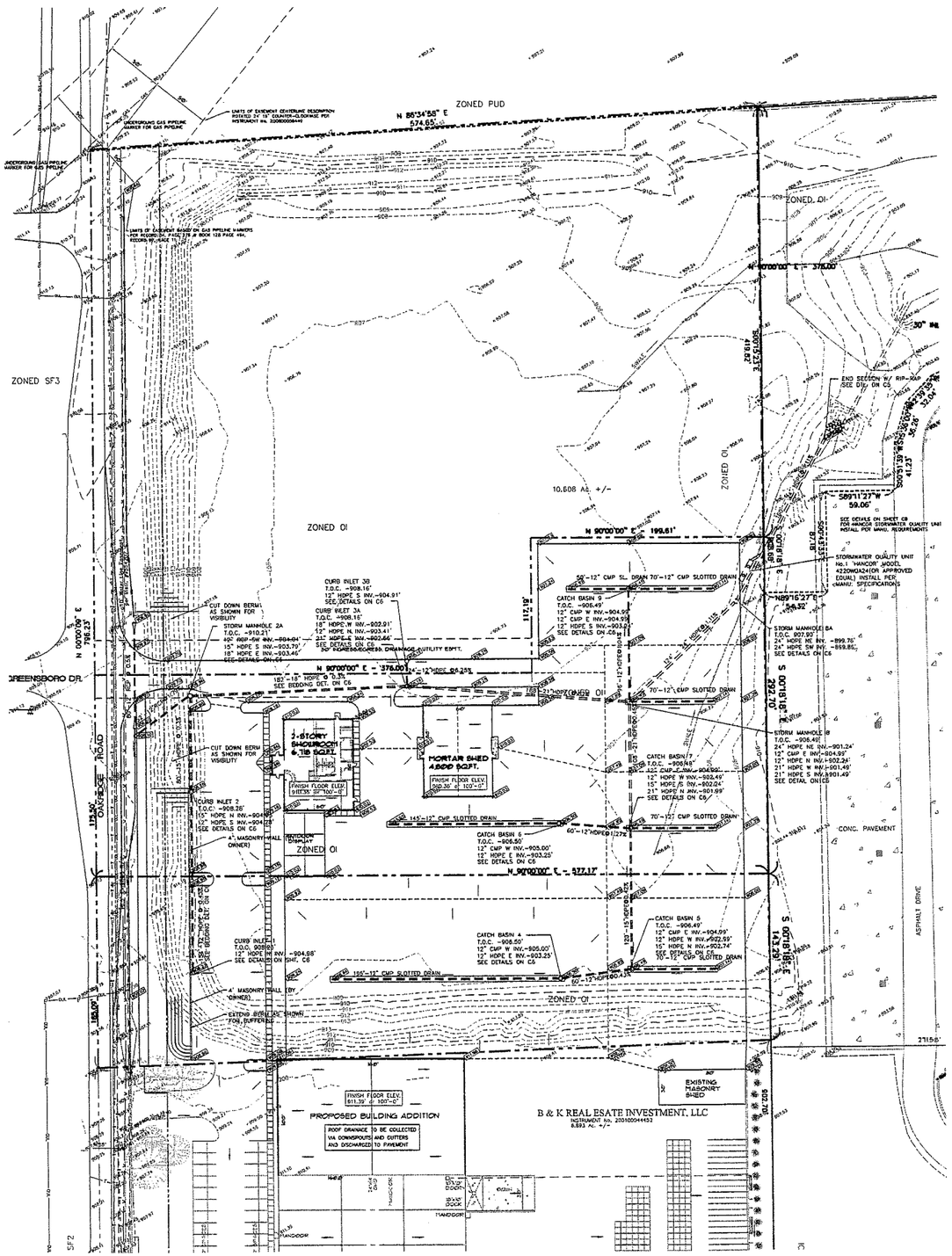

DRAINAGE & GRADING NOTES

1. EXISTING TOPOGRAPHY TAKEN FROM KEELER-WEBB ASSOC., DATED 02/28/07.

2. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK.

3. ALL GRADING/EARTHMOVING WORK TO BE DONE IN STRICT ACCORDANCE WITH ALL STATE AND LOCAL CODES AND REQUIREMENTS.

4. LAND ALTERATION WHICH STRIPS THE LAND OF VEGETATION, INCLUDING REGRADING, SHALL BE DONE IN A WAY THAT WILL MINIMIZE SOIL EROSION.

5. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE ALONG OAKRIDGE ROAD AT PROPOSED ENTRANCE.

6. THE DURATION OF TIME WHICH AN AREA REMAINS EXPOSED SHALL BE KEPT TO A PRACTICAL MINIMUM. THE AREA SHALL BE STABILIZED AS QUICKLY AS PRACTICAL WITH TEMPORARY SEEDING PER AMOUNTS SHOWN ON SHEET C4.

7. SEE SHEET C4 FOR EROSION CONTROL NOTES AND PLAN.

8. PRIOR TO CONSTRUCTION OF ANY PERMANENT STRUCTURES, ALL TOPSOIL AND ORGANIC MATTER, FROZEN, WET SOFT, LOOSE, OR UNDESIRABLE SOIL SHALL BE REMOVED. TOPSOIL SHALL BE REMOVED TO A MINIMUM DEPTH OF SIX INCHES (6") OR AS NECESSARY TO REMOVE ORGANIC MATTER IN THE AREAS TO BE OCCUPIED BY ROADS, WALKS AND DESIGNATED BUILDING AREAS.

9. TOPSOIL SHALL BE SEPARATED FROM SUITABLE FILL MATERIALS AND SHALL NOT BE USED AS FILL UNDER ANY CONSTRUCTION AREAS OR FUTURE EXPANSION AREAS.

10. STORM SEWER STRUCTURES SHALL COMPLY WITH CURRENT SPECIFICATION OF THE CITY, COUNTY AND ALL AGENCIES IN RESPECT TO DESIGN AND QUALITY OF CONSTRUCTION. GRANULAR BACKFILL SHALL BE REQUIRED UNDER ALL PAVEMENT AREAS AND WITHIN 5 FEET OF THE EDGE OF PAVEMENT AREAS.

11. PRECAST CONCRETE AND STEEL FOR MANHOLES AND INLETS SHALL BE IN ACCORDANCE WITH ASTM C-478.

12. TRENCHES SHALL BE OPENED SUFFICIENTLY AHEAD OF PIPE LAYING TO REVEAL OBSTRUCTIONS, AND SHALL BE PROPERLY PROTECTED AND/OR BARRICADED WHEN LEFT.

13. TRENCHES SHALL BE SHEETED AND GRADED AS NECESSARY TO PROTECT WORKMEN AND ADJACENT STRUCTURES. ALL TRENCHING SHALL BE DONE IN ACCORDANCE WITH O.S.H.A. STANDARDS TO PROTECT WORKMEN.

14. THE SUBGRADE SHALL BE PROOFROLLED WITH SUITABLE EQUIPMENT AND ALL SPONGY AND OTHERWISE UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.

15. ALL FILLED PLACES UNDER PROPOSED STORM AND SANITARY SEWER LINES AND/OR PAVED AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY MODIFIED AASHTO T-180 COMPACT TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99.

16. EXTRA STRENGTH REINFORCED CONCRETE PIPE TO BE PLACED UNDER PAVED AREAS AND A MINIMUM COVER OF 24" SHALL BE MAINTAINED.

17. STORM WATER SEDIMENT TRAPS SHALL BE CLEANED WHEN THEY BECOME HALF FILLED WITH SEDIMENT AND AFTER PERMANENT GROUND COVER HAS BEEN ESTABLISHED.

18. THE ABOVE PROPERTY DOES NOT LIE WITHIN A KNOWN FLOOD PLAIN (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP, PANEL NO. 18057C0119F, EFFECTIVE DATE FEBRUARY 2003.

19. ALL PROPOSED GRADES SHOWN ARE TOP OF PAVEMENT OR GRADE UNLESS OTHERWISE NOTED.

20. REMOVE ALL TREES AND STUMPS FROM AREA TO BE OCCUPIED BY ROAD AND SURFACED AREAS. REMOVAL OF TREES OUTSIDE THESE AREAS SHALL ONLY BE DONE AS NOTED ON DRAWINGS OR APPROVED BY THE OWNER.

21. ALL BRUSH, STUMPS, WOOD AND OTHER REFUSE FROM THE TREES SHALL BE BURIED ONSITE OR REMOVED TO DISPOSAL AREAS OFF OF THE SITE. DISPOSAL BY BURNING SHALL NOT BE PERMITTED UNLESS PROPER PERMITS ARE OBTAINED (WHERE APPLICABLE).THE LOCATION OF ON SITE BURY PITS SHALL BE DESIGNATED BY THE OWNER OR THE ENGINEER.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF TOPS, TRUNKS AND ROOTS OF EXISTING TREES ON THE PROJECT SITE THAT ARE TO REMAIN. EXISTINGTREES SUBJECT TO CONSTRUCTION DAMAGE SHALL BE BOXED, FENCED OR OTHERWISE PROTECTED BEFORE ANY WORK IS STARTED; DO NOT STOCKPILE WITHIN BRANCH SPREAD. REMOVE INTERFERING BRANCHES WITHOUT INJURY TO TRUNKS AND COVER SCARS WITH TREE PAINT.

23. REMOVE ALL ORGANIC MATERIAL FROM THE AREAS TO BE OCCUPIED BY BUILDINGS, ROADS, WALKS AND PARKING AREAS. PILE AND STORE TOPSOIL AT A LOCATION WHERE IT WILL NOT INTERFERE WITH CONSTRUCTION OPERATIONS. TOPSOIL SHALL BE REASONABLY FREE FROM SUBSOIL, DEBRIS, WEEDS, GRASS, STONES, ETC.

24. AFTER COMPLETION OF SITE GRADING AND SUBSURFACE UTILITY INSTALLATION, TOP SOIL SHALL BE REPLACED IN AREAS DESIGNATED ON THE EROSION CONTROL PLAN FOR SEEDING AND / OR SODDING. ANY REMAINING TOP SOIL SHALL BE USED FOR FINISHED GRADING AROUND STRUCTURES AND LANDSCAPING AREAS.

25. CONTRACTOR SHALL PERFORM ALL CUTTING, FILLING, COMPACTING OF FILLS AND ROUGH GRADING REQUIRED TO BRING ENTIRE PROJECT AREA TO GRADE AS SHOWN ON THE DRAWINGS.

26. ROUGH GRADING: THE TOLERANCE FOR PAVED AREAS SHALL NOT EXCEED 0.10 FEET PLUS OR MINUS ABOVE THE ESTABLISHED SUBGRADE. ALL OTHER AREAS SHALL NOT EXCEED 0.10 FEET PLUS OR MINUS THE ESTABLISHED GRADE. ALL BANKS AND OTHER BREAKS IN GRADE SHALL BE ROUNDED AT THE TOP AND BOTTOM.

27. THE CONTRACTOR SHALL CONFIRM ALL EARTHWORK QUANTITIES PRIOR TO START OF CONSTRUCTION. IF AN EXCESS OR SHORTAGE OF EARTH IS ENCOUNTERED, THE CONTRACTOR SHALL CONFIRM WITH THE OWNER AND ENGINEER THE REQUIREMENTS FOR STOCKPILING, REMOVAL OR IMPORTING OF EARTH.

28. MINOR ADJUSTMENTS TO THE GRADES MAY BE REQUIRED TO EARTHWORK BALANCES WHEN MINOR EXCESS MATERIAL OR SHORTAGES ARE ENCOUNTERED. IT IS RECOGNIZED BY THE PARTIES HERETO THAT THE CALCULATIONS OF THE ENGINEER IN DETERMINING EARTHWORK QUANTITIES SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE AMERICAN SOCIETY OF CIVIL ENGINEERS STANDARDS FOR SUCH CALCULATIONS. FURTHER, THAT THESE CALCULATIONS ARE SUBJECT TO THE INTERPRETATIONS OF SOIL BORINGS AS THE PHYSICAL LIMITS OF THE VARIOUS SOIL TYPES, ALSO THE ALLOWABLE VARIATION IN FINISH GRADE AND COMPACTION PERMITTED THE CONTRACTOR, AND THAT ALL OF THESE PARAMETERS MAY CAUSE EITHER AN EXCESS OR SHORTAGE OF ACTUAL EARTHWORK MATERIALS TO COMPLETE THE PROJECT. IF SUCH AN ACTUAL MINOR EXCESS OR SHORTAGE OF MATERIALS OCCURS, THE CONTRACTOR SHALL CONTACT THE ENGINEER TO DETERMINE IF ADJUSTMENTS CAN BE MADE TO CORRECT THE IMBALANCE OF EARTH.

EXISTING LEGEND

- EXISTING WATER LINE
- 6' WOVEN-WIRE FENCE
- 6' RAIL & POST FENCE
- UNDERGROUND TELEPHONE
- EASEMENT
- SETBACK LINE
- CENTERLINE
- UNDERGROUND GAS MAIN
- UNDERGROUND TELECOMMUNICATIONS
- PROPERTY or R/W LINE
- UNDERGROUND ELECTRIC LINE
- SANITARY SEWER
- EXISTING STORM SEWER
- CURB INLET
- 8"x8" AMERITECH PHONE PEDESTAL
- CINERGY ELECTRIC BOX
- STREET SIGN
- GAS VALVE
- EXISTING CONTOUR
- VEGETATION
- SANITARY MANHOLE
- EXISTING BUSH
- EXISTING IRON PIN FOUND
- EXISTING CATCH BASIN
- EXISTING WATER VALVE

PROPOSED LEGEND

- 6" CONCRETE CURB
- PROPOSED SANITARY SEWER
- FLOW LINE OF SWALE
- SUBDIVISION BOUNDARY
- ADJOINER PROPERTY LINE
- PROPOSED STORM SEWER
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED UNDERGROUND GAS
- PROPOSED UNDERGROUND WATER
- FLOW ARROW
- 763.70 PROPOSED GRADE
- ADA SPACE
- HEAVY-DUTY ASPHALT PAVEMENT
- LIGHT-DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT

GRADING/DRAINAGE PLAN

GRAPHIC SCALE

0 50 75 100 150 200

(IN FEET)
1 inch = 50 ft.

ISSUE		
DATE	FOR	
4-08-08	WESTFIELD T.A.C.	

KEELER-WEBB ASSOCIATES
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486 GRADLE DRIVE
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CUSTOM CAST STONE
734 EAST 169TH STREET
WESTFIELD, INDIANA 46074

GRADING / DRAINAGE PLAN
NEW BUILDING FOR
INDIANA BRICK
OAKRIDGE ROAD
WESTFIELD, INDIANA

DRAWN BY: CPW
CHECKED BY: ALD

PROJECT No.
0802-031

SHEET No.
C3

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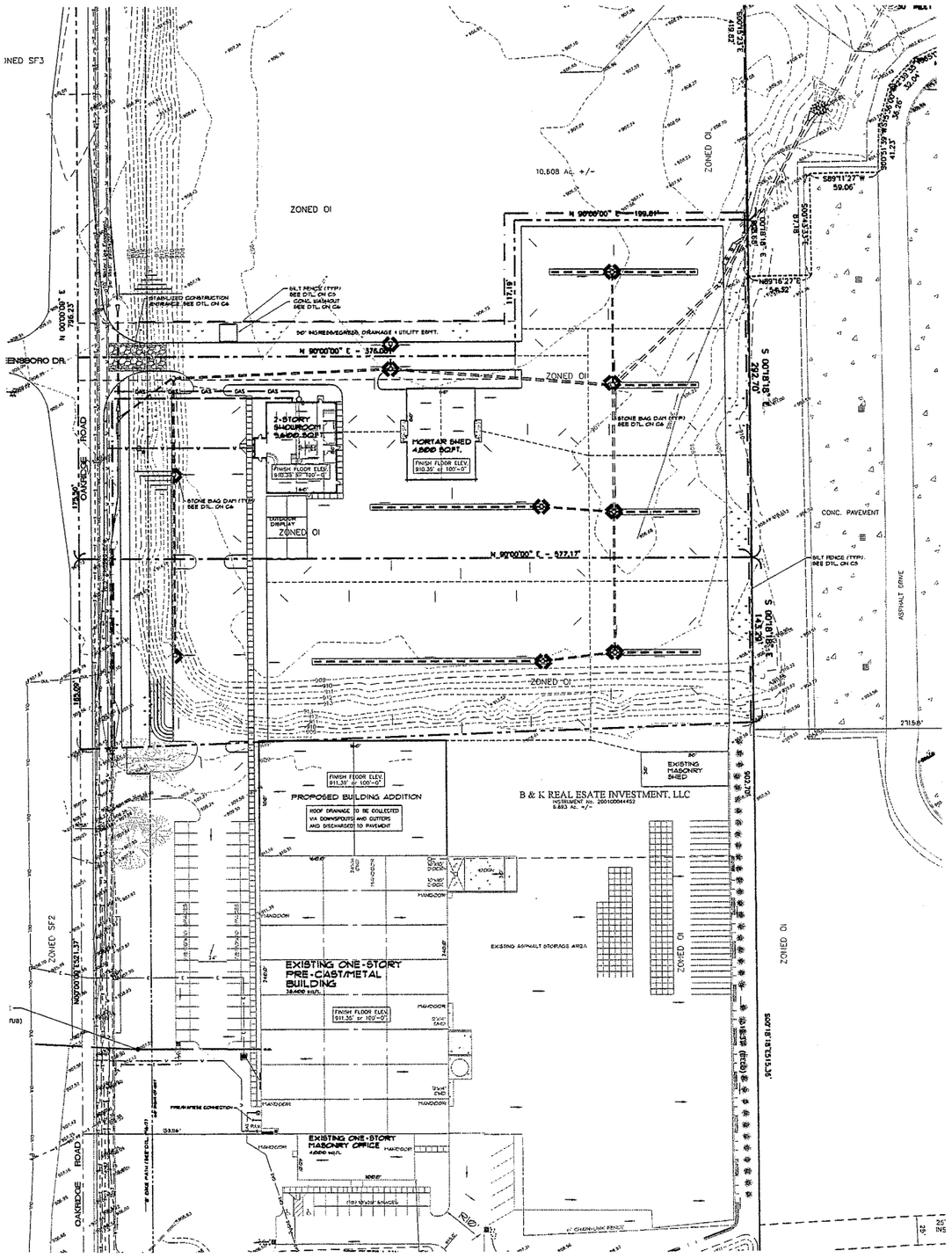

EROSION CONTROL NOTES

1. Contractor to verify all existing conditions prior to beginning work.
2. All grading/earthmoving work to be done in strict accordance with all State and Local Codes and Requirements.
3. Land alteration which strips the land of vegetation, including regrading, shall be done in a way that will minimize soil erosion.
4. The duration of time which an area remains exposed shall be kept to a practical minimum. The area shall be stabilized as quickly as practical with temporary seeding per amounts shown in note #7 and with erosion control blankets on all slopes and areas shown.
5. Permanent and final vegetation or structural erosion control devices shall be installed as soon as final grading is completed for each drainage structure or excavation.
6. Surface water shall be diverted away from the project area wherever possible. As earthwork construction progresses, the contractor shall take care to avoid creating any inadvertent run-off accumulation. At the end of each work day, the contractor shall survey the site and make any necessary earthwork adjustments to insure proper drainage and avoid potential hazards to adjacent landowners.
7. All permanent slopes shall be seeded with a mixture of mulch (3000 #) 1000 lbs. 12-12-12 fertilizer per acre, and red fescue at the rate of 40 lbs per acre , and 40 lbs. blue grass per acre. from March 1 to May 15 and August 10 to October 15.
8. All sediment control measures shall be installed prior to cleaning and grubbing operations and shall be maintained until permanent ground cover is established.
9. All sediment control measures shall be performed in strict accordance with the plans as approved by City of Westfield.
10. The Contractor shall provide adequate erosion protection measures during construction such as, but not limited to: Siltation basins, Silt traps, Straw bale dames, Soil Cement, Mulch and Seeding, Soil stabilization fabric, and Jute netting.
11. Erosion control blanket by "American Excelsior Company" (or equal). Anchor all erosion control blankets as required per manufacturer Curlex Products "Curlex Erosion Control Blanket (48" long) Staples shall be 11 gauge U-shaped, 6" long, and minimum 1" crown. Drive staples vertically into ground and use (4) staples at ends of roll. For slope installation, staple along length of roll at 5 foot intervals. For swale liner, staple along length of roll at 4 foot intervals. Another row of staples shall be placed in the center of the blanket alternately spaced form staples at each side of row.
12. Any grades established between May 15 to August 10 shall provide temporary seeding consisting of 40 lbs. per acre of annual rye grass.
13. For any seeding that takes place between October 15 to March 1, either rye or wheat may be substituted and spread at 3 bushels per acre. If grains are used they shall be cut at the time of permanent seeding. Cover seed with mulch 1 - 1 1/2 in. deep.
14. If temporary seeding is established prior to permanent seeding, the mulch may be eliminated except for exposed areas.

SEE SEEDING SCHEDULES ON THIS SHEET

PERSON RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES

GENERAL CONTRACTOR

DESIGN AND CONSTRUCTION LLC
GERRY MEYER
PO. BOX 930
WESTFIELD, IN 46074
(317) 867-1139

CONSTRUCTION SEQUENCE:

1. INSTALL PERIMETER SILT FENCE AT CONSTRUCTION LIMITS. POSITION THE FENCE TO INTERCEPT RUNOFF PRIOR TO ENTERING DRAINAGE SWALES.
2. AVOID DISTURBING DRAINAGE SWALES IF VEGETATION IS ESTABLISHED. IF DRAINAGE SWALES ARE BARE, INSTALL EROSION CONTROL BLANKETS OR SOD TO IMMEDIATELY STABILIZE.
3. INSTALL DROP INLET PROTECTION FOR ALL INLETS ON THE PROPERTY.
4. INSTALL END-SECTION PROTECTION, ON BOTH SIDES OF THE STORM SEWER, FOR ALL DAYLIGHTED STRUCTURES.
5. INSTALL GRAVEL CONSTRUCTION ENTRANCE THAT EXTENDS FROM THE STREET TO THE BUILDING PAD.
6. PERFORM PRIMARY GRADING OPERATIONS
7. CONTAIN EROSION FROM ANY SOIL STOCKPILES CREATED ON-SITE WITH SILT FENCE AROUND THE BASE.
8. ESTABLISH TEMPORARY SEEDING AND STRAW MULCH ON DISTURBED AREAS.
9. CONSTRUCT THE BUILDING AND INSTALL UTILITIES.
10. INSTALL DOWNSPOUT EXTENDERS ONCE THE ROOF AND GUTTERS HAVE BEEN CONSTRUCTED. EXTENDERS SHOULD OUTLET TO A STABILIZED AREA.
11. RE-SEED ANY AREAS DISTURBED BY CONSTRUCTION AND UTILITIES INSTALLATION WITH TEMPORARY SEED MIX WITHIN 3 DAYS OF COMPLETION OF DISTURBANCE.
12. GRADE THE SITE TO FINAL ELEVATIONS.
13. INSTALL PERMANANT SEEDING OR SOD.

TEMPORARY SEEDING AND STABILIZATION DATES

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WHEAT / RYE												
OATS												
ANNUAL RYE GRASS												
PERMANENT SEEDING												
NON-IRRIGATED*												
IRRIGATED												
DORMANT**												

IRRIGATION NEEDED DURING JUNE AND JULY. TO CONTROL EROSION AT TIMES OTHER THAN IN THE SHADED AREAS, USE MULCH.

* LATE SUMMER SEEDING DATES MAY BE EXTENDED 5 DAYS IF MULCH IS APPLIED

** INCREASE SEEDING APPLICATION BY 50 % DURING DORMANT PERIODS.

NOTE: MULCHING REQUIRED WHEN ACTUAL CONDITIONS HAMPER THE ESTABLISHMENT OF VEGATATIVE GROUND COVER.

SEEDING SCHEDULE

NOT TO SCALE

3 / C4

PERMANENT SEED MIXTURES

SPECIES	lbs. / ACRE	lbs. / 1,000 s.f.	SUITABLE PH	DRY	WELL DRAINED	WET
LEVEL / SLOPING OPEN AREAS						
TALL FESCUE	35	0.8	5.5-8.3	2	1	2
TALL FESCUE (RED CLOVER)**	25 5	0.6 0.12	5.5-8.3		1	
KENTUCKY BLUEGRASS CREEPING RED FESCUE	15 15	0.4 0.4	5.5-7.5	2	1	
STEEP BANKS AND CUTS						
TALL FESCUE KENTUCKY BLUEGRASS	15 25	0.4 0.6	5.8-7.5	2	1	2
TALL FESCUE EMERALD CROWNVETCH**	35 10	0.8 0.25	5.5-8.3	2	1	
LAWNS / HIGH MAINTAINANCE AREAS						
KENTUCKY BLUEGRASS CREPING RED FESCUE	40 40	0.9 0.9	5.8-7.5	2	1	
PERENNIAL RYEGRASS (TURF TYPE)	170	4.0	5.8-7.5		1	
TALL FESCUE	170	4.0	5.5-8.3	2	1	2

1 = PREFERRED 2 = WILL TOLERATE ** INOCULATE WITH SPECIFIC INOCULANT

TEMPORARY SEEDING

KIND OF SEED	PER 1000 sq. ft.	PER ACRE	REMARKS
WHEAT OR RYE	3.5 lbs.	2 bu.	COVER SEED 1" - 1 1/2" DEEP
SPRING OATS	2.3 lbs.	3 bu.	COVER SEED 1" DEEP
ANNUAL RYEGRASS	1 lbs.	40 lbs.	COVER SEED 1/4" DEEP*

* NOT NECESSARY WHERE MULCH IS APPLIED

SEED MIXTURES

NOT TO SCALE

2 / C4

PROPOSED LEGEND

- STONE BAG DAM
- RIP-RAP
- SWALE
- SILT FENCE
- LANDSCAPING SEEDING BLANKET (EROSION CONTROL BLANKET)
- PERMANENT SEEDING
- TEMPORARY SEEDING

EROSION CONTROL PLAN

NORTH

GRAPHIC SCALE

0 50 75 100 150 250

(IN FEET)
1 inch = 50 ft.

ISSUE	FOR
DATE	WESTFIELD T.A.C.
4-08-08	

KEELER-WEBB ASSOCIATES
Consulting Engineers-Planners-Surveyors
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CUSTOM CAST STONE
734 EAST 169TH STREET
WESTFIELD, INDIANA 46074

EROSION CONTROL PLAN
NEW BUILDING FOR INDIANA BRICK
OAKRIDGE ROAD
WESTFIELD, INDIANA

DRAWN BY: CPW
CHECKED BY: ALD

PROJECT No. 0802-031

SHEET No. C4

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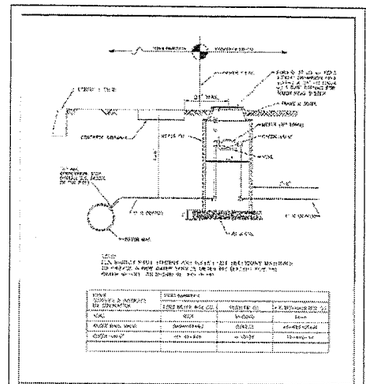
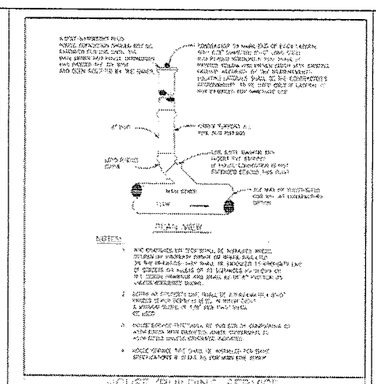
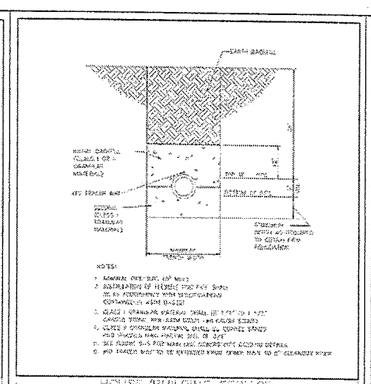


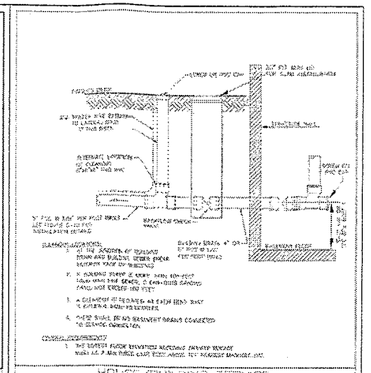
WATER METER AND PIT DETAIL
TOWN OF WESTFIELD, INDIANA



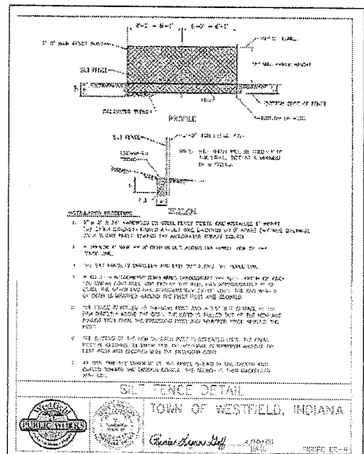
HOUSE/BUILDING SERVICE
CONNECTION DETAIL 1
TOWN OF WESTFIELD, INDIANA



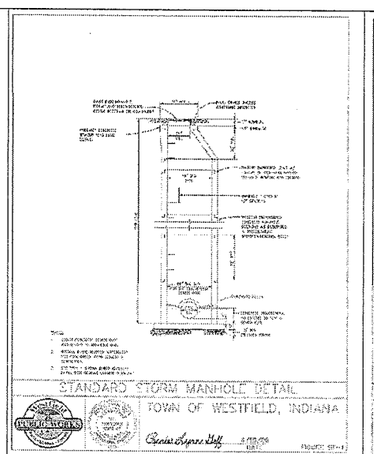
HOUSE/BUILDING SERVICE
BEDDING DETAILS
TOWN OF WESTFIELD, INDIANA



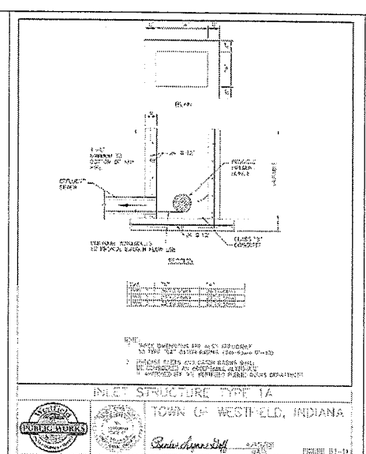
HOUSE/BUILDING SERVICE
CLEAN-OUT DETAIL
TOWN OF WESTFIELD, INDIANA



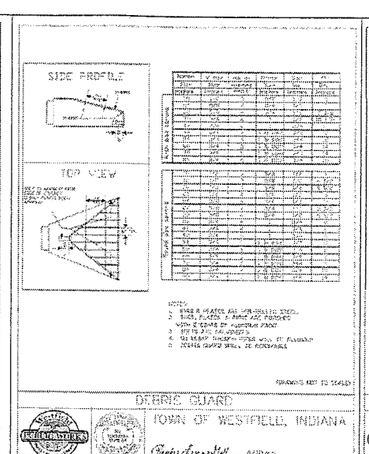
SILT FENCE DETAIL
TOWN OF WESTFIELD, INDIANA



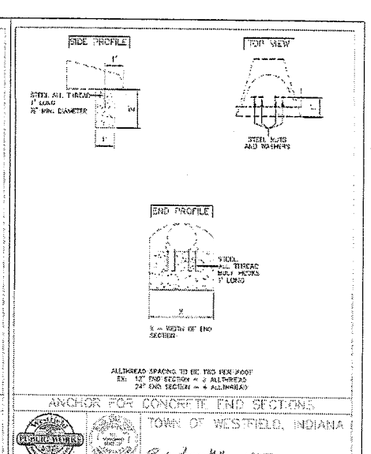
STANDARD STORM MANHOLE DETAIL
TOWN OF WESTFIELD, INDIANA



INLET STRUCTURE TYPE 1A
TOWN OF WESTFIELD, INDIANA



DEBRIS GUARD
TOWN OF WESTFIELD, INDIANA



ANCHOR FOR CONCRETE END SECTIONS
TOWN OF WESTFIELD, INDIANA

CONTRACTOR MUST OBTAIN AND ADHERE TO "UTILITY AND INFRASTRUCTURE CONSTRUCTION STANDARDS AND SPECIFICATIONS" FOR THE CITY OF WESTFIELD

ISSUE FOR

DATE	
4-08-08	WESTFIELD T.A.C.

KEELER-WEBB ASSOCIATES
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WESTFIELD STANDARD DETAILS
NEW BUILDING FOR INDIANA BRICK
OAKRIDGE ROAD
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DRAWN BY: CPW
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PROJECT No. 0802-031
SHEET No. C5

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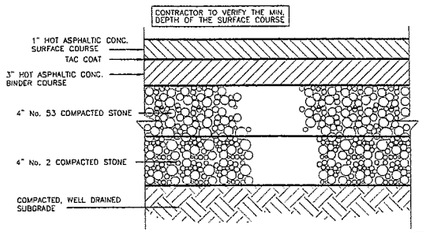
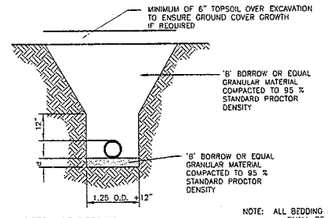


HEAVY DUTY ASPHALT PAVEMENT SECTION (1 / C6)
NOT TO SCALE



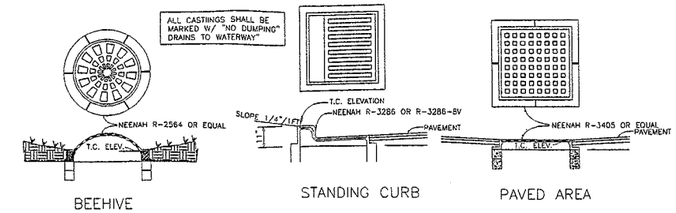
DEPTH OF BEDDING MATERIAL BELOW PIPE

INSIDE DIAMETER	(d) MIN.
27" & SMALLER	3"
30" - 60"	4"
66" & LARGER	6"

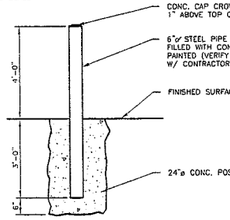
NOTE: ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" - 12" BALANCED LIFTS

A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE

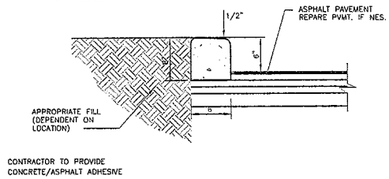
CONCRETE PIPE TRENCH DETAIL (W/I 5' OF PAVEMENT) (7 / C6)
NOT TO SCALE



TYPES OF STORM SEWER CASTINGS (1690A FITS BELL ON 24" RCP) (13 / C6)
(NO SCALE)

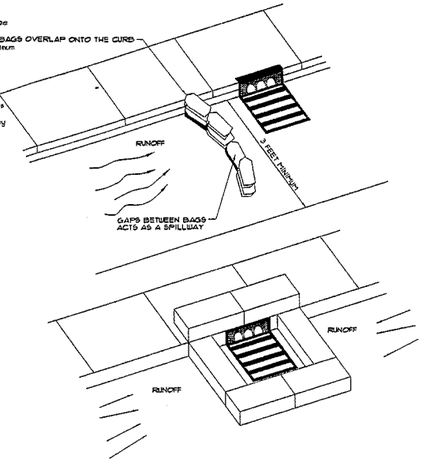


PIPE BOLLARD DETAIL (2 / C6)
SCALE: 1/2" = 1'-0"

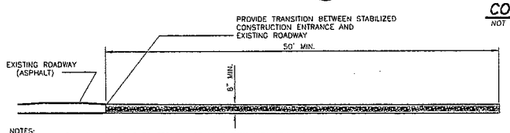


CONCRETE CURB DETAIL (8 / C6)
NOT TO SCALE

1. Fill geotextile bags approximately half full with 2 to 3 inch stone or rubble.
2. At a position downslope of the lot and upslope of the inlet, lay bags tightly in a row curving upslope from curb and away from inlet.
3. Overlap bags onto the curb and extend a minimum of 3 feet into the street.
4. For additional layers, overlap bags with the row beneath and leave one-bag gap in the middle of the top row to serve as a spillway.
5. Place bags in an arc around curb inlets that are in a sump position.
6. Set up safety/traffic barriers to keep vehicles from hitting bags, causing possible injury.
7. Inspect and repair as needed, and remove any accumulated sediments after every storm.

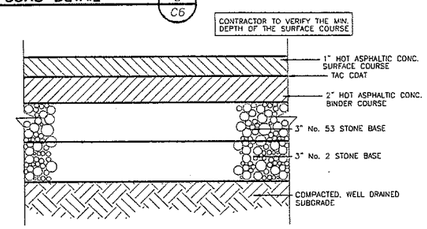


CURB INLET / CATCH BASIN PROTECTION DETAIL (14 / C6)
NOT TO SCALE

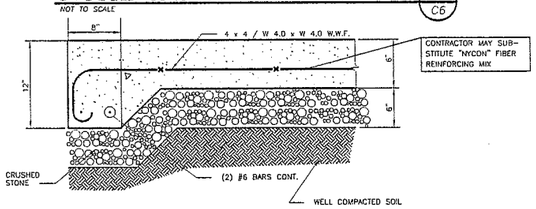


NOTES:
1. 1" - 2 1/2" CRUSHED STONE, NOT LESS THAN FULL WIDTH OF INGRESS AND EGRESS.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO EXISTING ROADWAY. ALL SEDIMENT SPILLED, TRACKED, OR DROPPED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

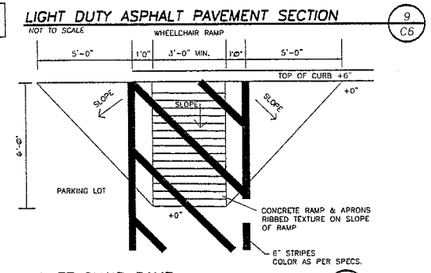
STABILIZED CONSTRUCTION ENTRANCE (3 / C6)
NOT TO SCALE



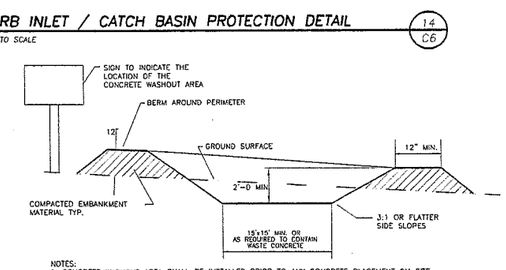
LIGHT DUTY ASPHALT PAVEMENT SECTION (9 / C6)
NOT TO SCALE



CONCRETE APRON DETAIL (4 / C6)
NOT TO SCALE

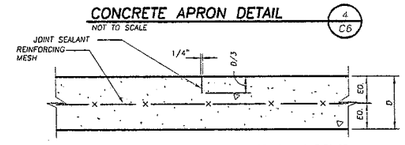


WHEELCHAIR RAMP (10 / C6)
NOT TO SCALE



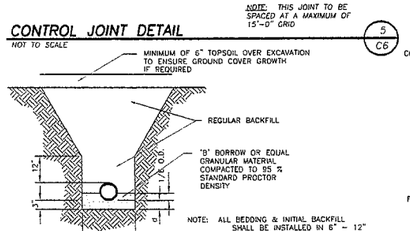
NOTES:
1. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE TRUCKS AND PUMPS RIGS.
3. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
4. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED, FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
5. WHEN THE CONCRETE WASHOUT ARE IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE INSPECTOR.

CONCRETE WASHOUT DETAIL (15 / C6)
NOT TO SCALE



NOTE: THIS JOINT TO BE SPACED AT A MAXIMUM OF 15'-0" GRID

CONTROL JOINT DETAIL (5 / C6)
NOT TO SCALE



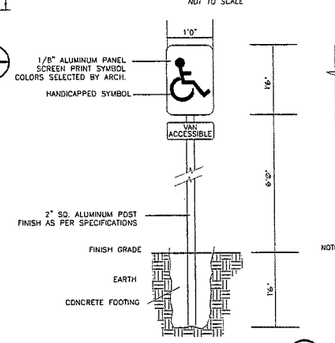
DEPTH OF BEDDING MATERIAL BELOW PIPE

INSIDE DIAMETER	(d) MIN.
27" & SMALLER	3"
30" - 60"	4"
66" & LARGER	6"

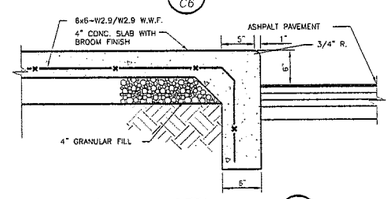
NOTE: ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" - 12" BALANCED LIFTS

A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE

CONCRETE PIPE TRENCH DETAIL (6 / C6)
NOT TO SCALE (MORE THAN 5' FROM PVMT.)



HANDICAPPED PARKING SIGN (11 / C6)
NOT TO SCALE



CONCRETE WALK DETAIL (12 / C6)
NOT TO SCALE

NOTES
1. WHERE SIDEWALK IS CONSTRUCTED IMMEDIATELY ADJACENT TO CURB, THE SURFACE OF THE SIDEWALK SHALL BE CONSTRUCTED 1/2" HIGHER THAN THE CURB.
2. TRANSVERSE JOINTS SHALL BE CUT WITH A JOINTER HAVING A RADIUS OF 1/2" AT 5'-0" SPACING AND 48'-0" BETWEEN EXPANSION JOINTS.
3. SUBGRADE UNDER ALL CURB, SIDEWALK, AND DRIVES SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 207.02 OF THE STANDARDS SPECIFICATIONS (FOR SIDEWALK ONLY)
4. WHERE SIDEWALK IS CONSTRUCTED ADJACENT TO CURB, THE SPACE BEHIND THE CURB SHALL BE FILLED WITH SUITABLE MATERIAL TO THE REQUIRED ELEVATION AND COMPACTED IN LAYERS NOT TO EXCEED 6".
5. WHEN BUILT IN CONJUNCTION WITH CONCRETE PAVEMENT, EXPANSION AND CONTRACTION JOINTS SHOULD BE PLACED AT THE SAME LOCATIONS AS IN THE PAVEMENT SLAB. THE CURB AND GUTTER SHOULD BE TIED TO THE PAVEMENT BY #4 DEFORMED RE-BAR AT 3'-0" o.c. IF NO CONCRETE PAVEMENT IS BEING BUILT, AT THE TIME THE CURB IS CONSTRUCTED, EXPANSION JOINTS SHALL BE PLACED AT THE ENDS OF ALL RADII AND AT INTERVALS NOT TO EXCEED 100'. CONTRACTION JOINTS SHALL BE PLACED AT 20' o.c.

ADAM L. DeHART REGISTERED No. 29500025 STATE OF INDIANA LAND SURVEYOR

ISSUE		FOR
DATE		
4-08-08	WESTFIELD T.A.C.	

KEELER-WEBB ASSOCIATES
Consulting Engineers–Planners–Surveyors
486 GRADLE DRIVE
CARMEL, INDIANA 46032
PHONE (317) 574-0140
E-mail: info@keelerwebb.com
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CUSTOM CAST STONE
734 EAST 169TH STREET
WESTFIELD, INDIANA 46074

SITE DETAILS
NEW BUILDING FOR INDIANA BRICK
OAKRIDGE ROAD
WESTFIELD, INDIANA

DRAWN BY: CPW
CHECKED BY: ALD
PROJECT No. 0802-031
SHEET No. C6

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STORMWATER POLLUTION PREVENTION PLAN NOTES

A1 Plan Index Provided on the *Cover sheet*
A2 situation plan denoting lot numbers, boundaries, and streets is provided on *the Cover sheet*.
A3 Project Type: *This project includes a building addition, new office building and a new storage shed on a 11.293 Acre site.*
A4 Vicinity Map: Denoted on *Cover Sheet*
A5 Legal Description of Project Site: *See attached Cover Sheet.*
A6 Location of all lots and proposed site improvements: See Sheets *C1* to *L1.*
A7 14 Digit Hydrologic Unit Code: *05120201090055*
A8 State or Federal water quality permits: *None required*
A9 *The Stormwater leaves the site at the northwest corner of the site and enters a regional retention pond.*
A10 For location of all wetlands, lakes and water courses on and adjacent to site: *By graphic plotting the above described real estate does not lie within a delineated Wetland per U.S. Department of Interior Wetland Inventory Map, at the Westfield Quad, effective date 1986.* See Site Development Plan Sheet *C4* for more detail.
A11 Receiving Waters: *Harmon Clark Legal Drain*
A12 Identification of potential discharges to groundwater: *none found on the site*
A13 100 Year Floodplains, Floodways and Flood Fringes: *The subject property does not lie within a known flood plain (Zone AE) per FEMA Flood Insurance Rate Map No. 18057C0119F, effective date February 17, 2003.*
A14 Pre-Construction and Post Construction Peak Discharge:
10 year Pre-Construction Peak Discharge = 6 CFS
100 Post Construction Peak Discharge = 18 CFS
A15 Adjacent Land Use (see sheet *C2* for more information):
North: (VACANT LOT)
South: (169TH STREET)
East: (Industrial building)
West: (OAKRIDGE ROAD
A16 Locations and approximate boundaries of all disturbed areas: See Sheets *C1 – C4* for locations:
A17 Identification of existing vegetative cover: See Topographic Survey *C2.*
A18 Soils Map including descriptions and limitations: See Sheet *C2* & *C4* for soils map, description and limitations.
A19 Locations, size and dimensions of proposed stormwater systems: See Site Development Plan Sheet *C3* for proposed storm sewer system.
A20 Locations, size and dimensions of any proposed off-site construction activities associated with this project: *(None)*
A21 Locations of Soil Stockpiles: *All topsoil stockpiles are temporary, since the topsoil will be spread around the site to promote the growth of grass in all landscaped areas.*
A22 Existing site topography: See Sheet *C2* for existing site topography.
A23 Proposed final topography: See Site Development Plan Sheet *C3* for proposed site grading and drainage patterns.
B1 Description of potential pollutants sources associated with the construction activities: Silt and sediment from exposed soils, leaves, mulch, vehicular sources such as leaking fuel or oil, brake fluid, brake dust, trash, debris, biological agents found in trash, fertilizers, herbicides, pesticides, acid rain, lime dust, and concrete washout.
B2 Sequencing of stormwater quality implementation relative to land disturbance activities:

This plan has been created in an effort to eliminate sediment from leaving the Westfield Storage project during construction protecting the adjoining properties and the Harmon Clark Legal Drain.

PRECONSTRUCTION ACTIVITIES

1. Call the Indiana Underground Plant Protection Systems, Inc. ("Holey Moley") at 1-800-382-5544 to check the location of any existing utilities. They should be notified two working days before construction takes place.
2. An orange construction fence shall be constructed along the perimeter of any tree preservation areas prior to any earth moving.
3. A silt fence shall be installed at the edges of the project site where there is potential for any stormwater runoff. Potential areas are identified based on existing topography, protect important trees and associated root zones. Evaluate existing vegetation suitable for use as filter strips along the Southern and Eastern property Lines and along the at the of
4. Maintain a 10' minimum grass filter strip along all boundaries.
5. A construction entrance shall be placed per the plan location.
6. Establish construction staging area for equipment and vehicles as far from detention ponds and swales as possible.
7. Establish onsite location for owner/operator/contractor placement of approved plans and Rule 5 NOI and Rule 5 inspection documentation.

ESTABLISH SILT BASIN:

1. Contractor to evaluate location of soil stockpile area and prep with silt fence (see details).
2. Install the primary outfall (6CC) system for the proposed outfall located at the *Northern* boundary of the site. Per the Storm Water Pollution Protection plan details, provide a perforated riser for temporary sediment basin.
3. After completion of the outlet pipe and perforated riser, commence construction of the temporary diversion swales and temporary sediment basin.

CONSTRUCTION ACTIVITIES:

1. Once erosion and sediment control measures are in place, begin land clearing followed immediately by rough grading. Do not leave large areas unprotected for more than 15 days. Rule 5 requires that all disturbed areas that potentially will be idle for 15 days or more will be stabilized (seeded, mulched, etc.) immediately.
2. After completion of mass grading, final grade, and seed pond banks, landscape berms, common areas and swales immediately after grading is completed.
3. Upon completion of mass grading, install sanitary and storm sewers. As storm sewers are constructed, install inlet protection measures. Install riprap upon completion of end section installation.
4. Install rock check dams as indicated per plans and details.
5. Once pavement is in place, install inlet sediment barriers.
6. Once inlet protection is in place, final grade all areas. Upon completion of all grading, verify depth of pond per plan requirement, dredge as needed.

B3 Stable construction entrance location(s) and specifications. See Sheet *C4* for location and Sheet *C6* for construction entrance details and specifications.
B4 Sediment control measures for sheet flow areas: See Erosion Control Plan Sheet *C4* for locations of sediment control measures and Sheet *C5 & C6* construction details and specifications.
B5 Sediment control measures for concentrated flow areas: See Erosion Control Plan Sheet *C4* for locations of sediment control measures and Sheet *C5 & C6* construction details and specifications.
B6 Storm sewer inlet protection measures, locations, and specifications: See Erosion Control Plan Sheet *C4* for locations of inlet protection measures and Sheet *C5 & C6* construction details and specificaiotns.
B7 Runoff control measures: See Erosion Control Plan Sheet C4 for locations of runoff control measures and Sheet *C5 & C6.* construction details and specifications.
B8 Stormwater outlet protection specifications: See Erosion Control Plan Sheet *C4* for proj locations of stormwater outlet control measures and Sheet *C5 & C6* construction details and specifications.
B9 Grade stabilization structure locations and specifications: See Erosion Control Plan Sheet *C4* for locations of grade stabilization control measures and Sheet *C5 & C6* construction details and specifications.
B10 Location, dimensions, specifications and construction details of each stormwater quality measure: See Erosion Control Plan Sheet *C4* for locations of various stormwater quality measures and Sheet *C5 & C6* construction details and specifications.
B11 Temporary surface stabilization methods appropriate for each season: See Erosion Control Plan Sheet *C4* for locations of temporary surface stabilization measures and Sheet *C5 & C6* construction details and specifications.
B12 Permanent surface stabilization specifications: See Erosion Control Plan Sheet C- for locations of permanent surface stabilization measures and Sheet *C5 & C6* construction details and specifications.

B13 Material Handling and spill prevention plan:

Purpose
The intention of this Spill Prevention, Control and Countermeasures (SPCC) is to establish the procedures and equipment required to prevent the discharge of oil and hazardous substances in quantities that violate applicable water quality standards, cause a sheen upon or discoloration of the surface of navigable waters or adjoining shorelines, or cause sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines. The Plan also establishes the activities required to mitigate such discharges (i.e. countermeasures) should they occur.
Definitions:
Pollutant: means pollutant of any kind or in any form, including but not limited to sediment, paint, cleaning agents, concrete washout, pesticides, nutrients, trash, hydraulic fluids, fuel, oil, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged oil.
Discharge:
Includes but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.
Navigable Waters:
Means all waters of the United States that are a navigable stream, lake, or sea (Note: This definition is usually interpreted to mean any wastewater (even normally dry wash or storm sewer) that eventually drains into a navigable stream).
Plan Review and Amendments:
This plan shall be reviewed and/or amended, if necessary, whenever there is a change in the design of the site, construction, operation, or maintenance which materially affects the site's potential for the discharge of a regulated material.
Prediction of Potential Spills:
1. Nearest Navigable Water: *(White River)*
2. Drainage System: All storm drainage leaves the *industrial* site by *closed storm systems* to the South and drains to the regional retention pond.
3. Possible Spill Sources (during and post construction): Vehicular sources such as leaking fuel or oil, brake fluid, grease, antifreeze; construction trash and debris, biological agents found in trash and debris, fertilizers, household items including but not limited to cleaning agents, chemicals, paint, herbicides and pesticides.
4. Groundwater Contamination:
The facility maintains *NO* above ground or underground storage tanks at this site. Therefore, it is felt that there is little or no possibility of post construction groundwater contamination. The facility does have *City of Westfield sanitary sewer* and *City of Westfield water*.

Alert Procedures for Spills:
1. Any personnel observing a spill will immediately instigate the following procedures:
a. Dialing "0" from any telephone
b. Notify the appropriate emergency personnel.
2. The Emergency Coordinator will then take the following actions:
c. Barricade the areas allowing no vehicles to enter or leave the spill zone.
b. Notify the Indiana Department of Environmental Management, Office of Emergency Response by calling the appropriate telephone number:
Office – (317)-233-7745
Toll Free – (800)-233-7745 Also the National Response Center at (800)-424-8802 and provide the following information:
– Time of observation of the spill
– Location of the spill
– Identity of material spilled
– Probable source of the spill
– Probable time of the spill
– Volume of the spill and duration
– Present and anticipated movement of the spill
– Weather conditions
– Personnel at the scene
– Action initiated by personnel
c. Notify the *Westfield* Fire Department: 9-1-1
d. Notify the *Westfield* Police Department: 9-1-1
e. Notify waste recovery contractor, maintenance personnel or other contractual personnel as necessary for clean-up.
f. Coordinate and monitor clean-up until the situation has been stabilized and all spills have been eliminated.
g. Cooperate with the IDEM-OER on procedures and reports involved with the event.
Cleanup Parameters:
1. The Developer/owners shall be continuously kept informed, maintain lists of qualified contractors and available Vac-trucks, tank pumpers and other equipment readily accessible for clean-up operations. In addition, a continuously updated list of available absorbent materials and clean-up supplies should be kept on site.
2. All maintenance personnel shall be made aware of techniques for prevention of spills. They shall be informed of the requirements and procedures outlined in this plan. They shall be kept abreast of current developments or new information on the prevention of spills and/or necessary alterations to this plan.
3. When spills occur which could endanger human life and this becomes primary concern, the discharge of the life saving protection function will be carried out by the local police and fire departments.
4. Absorbent materials, which are used in cleaning up spilled materials, will be disposed of in a manner subject to the approval of the Indiana Department of Environmental Management.
5. Flushing of spilled material with water will not be permitted unless so authorized by the Indiana Department of Environmental Management or the local emergency response agency.

B14 Monitoring and maintenance guidelines for pollution prevention measures:
Stone Bag Dam Maintenance Requirements
1. Inspect Stone Bag Dams after each storm and promptly remove any sediment deposits to insure adequate storage volume for the next rain, taking care not to undermine the entrenched bales.
2. Inspect periodically for deterioration or damage from construction activities and repair immediately.
3. After the contributing drainage area has been stabilized, remove all straw bales and sediment deposits, bring the disturbed area to grade and stabilize it.
Silt Fence Maintenance Requirements
1. Inspection of the silt fence periodically and after each storm event.
2. If fence fabric tears, starts to decompose, or in any way becomes ineffective, replace the affected portion immediately.
3. Remove deposited sediment when it reaches half the height of the fence at its lowest point or is causing the fabric to bulge.
4. Take care to avoid undermining the fence during cleanout.
5. After the contributing drainage area has been stabilized, remove the fence and sediment deposits, bring the disturbed area to grade and stabilize it.
Temporary Sediment Trap Maintenance Requirements
1. Inspect temporary sediment traps after each storm event and immediately repair any erosion and piping holes.
2. Remove sediment when it has accumulated to one-half the design depth.
3. Replace spillway gravel facing when clogged.
4. Inspect vegetation and re-seed if necessary.
5. Check the spillway depth periodically to insure a minimum of 1.5 ft. depth from the lowest point of the settled embankment to highest point of the spillway crest and fill any low areas to maintain desired elevation.
6. Promptly replace any displaced rip-rap, being careful that no stones in the spillway are above design grade.
7. After all disturbed areas have been stabilized, remove the structure and sediment, grade the site to blend with adjoining areas and stabilize it.
Sandbag Curb Inlet Barrier Maintenance Requirements
1. Inspect frequently for damage by vehicular traffic and repair if necessary.
2. Inspect after each storm event.
3. Remove sediment, without flushing, when it reaches half the height of the barrier.
4. Deposit removed sediment where it will not enter storm sewer drains.
Block and Gravel Curb Inlet Protection Maintenance Requirements
1. After each storm event remove the sediment and replace the gravel, replace the geotextile fabric if used.
2. Periodically remove sediment and tracked-on soil from the street, without flushing, to reduce the sediment load on the curb inlet protection.
3. Inspect periodically for damage and repair. Keep grates free of debris.
4. After the contributing drainage area has been stabilized, remove the gravel, wire mesh, geotextile fabric and sediment deposits and dispose of them properly.
Erosion Control Blanket (Surface Applied) Maintenance Requirements
1. During vegetative establishment, inspect after each storm event for any erosion below the blanket.
2. If any area(s) shows erosion, pull back that portion of the blanket covering it, re-seed the area and relay and staple the blanket.
3. After vegetative establishment check the treated area periodically.
Temporary Gravel Construction Entrance Maintenance Requirements
1. Inspect entrance pad and sediment disposal area weekly and after storm events or heavy use.
2. Reshape as needed for drainage and runoff control.
3. Topdress with clean stone as needed.
4. Immediately remove mud and sediment tracked or washed onto streets by brushing or sweeping. Flushing should only be used if the water is conveyed into a sediment trap or basin.
5. Repair any broken road pavement immediately.

B15 Erosion & sediment control specifications for individual building lots: See Sheet *C6 & C7* for Construction details and specifications for erosion and sediment control on individual building lots not included in this phase of the project.

C1 Description of pollutants and their sources associated with the proposed land use: Silt and sediment from exposed soils, leaves, mulch, vehicular sources such as leaking fuel or oil, brake fluid, brake dust, grease, antifreeze, metals, rubber fragments, road grit, salts and sands, constructions trash and debris, fertilizers, household items including but not limited to cleaning agents, chemicals, paint, miscellaneous home improvement materials, toys and clothing and animal waste, elevated storm runoff temperatures, acid rain pesticides and pathogens.

C2 Sequence describing stormwater quality measure implementation:
1. Inspect and maintain all erosion control measures as detailed in the Stormwater Pollution Prevention Measures Maintenance Requirements beginning immediately after installation and continuing until vegetation has been sufficiently established and all construction activity is complete.
2. Remove all individual inlet protection and Stone Bag Dams, silt fences etc. only after seeding and sufficient vegetation growth has been established in each area to a point where sediment/pollutants will not enter the drainage or storm sewer system.
3. Inspection and maintenance of all common areas or right-of-way and infrastructure improvements is the responsibility of the owner/developer or his designee until improvements are accepted for maintenance by owners association or local agencies.
4. Inspection and maintenance of individual lots is the responsibility of the builder or his designee until the owner buys and thereby accepts responsibility for the individual lot.

C3 Description of proposed post construction stormwater quality measures: Site and facility design for stormwater quality protection on this site employs a multi-level strategy consisting of:
1. Reducing or eliminating post-project runoff.
2. Controlling sources of pollutants.
3. And if needed, treating contaminated stormwater runoff before discharging it into the storm sewer system or receiving waters.
Typical stormwater quality measures for reducing, eliminating or controlling pollutants (source controls) include:
a. This sites stormwater is discharged to an off site detention pond Northeast of the property.
b. See sheets C-3 7 and L1 for permanent seeding, temporary seeding, and landscaping plantings in all vegetated areas not occupied by buildings, parking or other similar improvements to the site.
c. See sheets C4 C7 and L1 for all required mulching of permanent seeding, temporary seeding, and landscaped areas on the site.

C4 Location, dimensions, specifications and construction details of stormwater quality measures:
See Erosion Control Plan Sheet *C4* for locations of permanent stormwater quality measures and Sheet *C5 & C6* construction details and specifications.

C5 Description of maintenance guidelines for proposed water quality measures: See Owners BMP Operations and Maintenance Manual.

ADDITIONAL STORMWATER POLLUTION PREVENTION MEASURES:

Vehicle & Equipment Maintenance

Description and Purpose

Prevent or reduce the contamination of stormwater resulting from vehicle and equipment maintenance by running a "dry and clean site". The best option would be to perform maintenance activities at an offsite facility. If this option is not available then work should be performed in designated areas only, while providing cover for materials stored outside, checking for leaks and spills, and containing and cleaning up spills immediately.

Suitable Applications

These procedures are suitable on all construction projects where on onsite yard area is necessary for storage and maintenance of heavy equipment and vehicles.

Limitations

Onsite vehicle and equipment maintenance should only be used where it is impractical to send vehicles and equipment offsite for maintenance and repair. Sending vehicles/equipment offsite should be done in conjunction with a Stabilized Construction Entrance/Exit. Outdoor vehicle or equipment maintenance is a potentially significant source of stormwater pollution. Activities that can contaminate stormwater include engine repair and service, changing or replacement of fluids, and outdoor equipment storage and parking (fluid leaks).

Implementation

If maintenance must occur onsite, use designated areas, located away from drainage courses. Dedicated maintenance areas should be protected from stormwater runon and runoff, and should be located at least 50 feet from downstream drainage facilities and watercourses.

Drip pans or absorbent pads should be used during vehicle and equipment maintenance work that involves fluids, unless the maintenance work is performed over an impermeable surface in a dedicated maintenance area.

Place a stockpile of spill cleanup materials where it will be readily accessible.

All fueling trucks and fueling areas are required to have spill kits and/or use other spill protection devices.

Use absorbent materials on small spills. Remove the absorbent materials promptly and dispose of properly.

Inspect onsite vehicles and equipment daily at startup for leaks and repair immediately.

Keep vehicles and equipment clean; do not allow excessive build-up of oil and grease.

Segregate and recycle wastes, such as greases, used oil or oil filters, antifreeze, cleaning solutions, batteries, hydraulic and transmission fluids. Provide secondary containment and covers for these materials if stored onsite.

Train employees and subcontractors in proper maintenance and spill cleanup procedures.

Drip pans or plastic sheeting should be placed under all vehicles and equipment placed on docks, barges, or other structures over water bodies when the vehicle or equipment is planned to be idle for more than 1 hour.

Properly dispose of used oils, fluids, lubricants and spill cleanup materials.

Do not place used oil in a dumpster or pour into a storm drain or watercourse.

Properly dispose of or recycle used batteries.

Do not bury used tires.

Repair leaks of fluids and oil immediately.

Listed below is further information if you must perform vehicle or equipment maintenance onsite.

Inspection and Maintenance

Inspect and verify that BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly to verify continued BMP implementation.

Keep ample supplies of spill cleanup materials onsite.

Maintain waste fluid containers in leak proof condition.

Vehicles and equipment should be inspected on each day of use. Leaks should be repaired immediately or the problem vehicle(s) or equipment should be removed from the project site.

Inspect equipment for damaged hoses and leaky gaskets routinely. Repair or replace as needed.

Vehicle and Equipment Fueling

Description and purpose

Vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.

Limitations

Onsite vehicle and equipment fueling should only be used where it is impractical to send vehicles and equipment offsite for fueling. Sending vehicles and equipment offsite should be done in conjunction with a Stabilized Construction Entrance/Exit.

Implementation

Use offsite fueling stations as much as possible. These businesses are better equipped to handle fuel and spills properly. Performing this work offsite can also be economical by eliminating the need for separate fueling area at a site.

Discourage "topping-off" of fuel tanks.

Absorbent spill cleanup materials and spill kits should be available in fueling areas and on fueling trucks, and should be disposed of properly after use.

Drip pans or absorbent pans should be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area.

Use absorbent materials on small spills. Do not hose down or bury the spill. Remove the absorbent materials promptly and dispose of properly.

Avoid mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas.

Train employees and subcontractors in proper fueling and cleanup procedures.

Dedicated fueling areas should be protected from stormwater runon and runoff, and should be located at least 50 ft. away from downstream drainage facilities and watercourses. Fueling must be performed on level-grade areas.

Protect fueling areas with berms and dikes to prevent runon, runoff, and to contain spills.

Nozzles used in vehicles and equipment fueling should be equipped with an automatic shutoff to control drips. Fueling operations should not be left unattended.

Inspection and Maintenance

Vehicles and equipment should be inspected each day of use for leaks. Leaks should be repaired immediately or problem vehicles or equipment should be removed from the project site.

Keep ample supplies of spill cleanup materials onsite.

Immediately clean up spills and properly dispose of contaminated soil and cleanup materials.

Solid Waste Management

Description and Purpose

Solid waste management procedures and practices are designed to prevent or reduce the discharge of pollutants to stormwater from solid or construction waste by providing designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors.

Suitable Applications

This BMP is suitable for construction sites where the following wastes are generated or stored:

1. Solid waste generated from trees and shrubs removed during land clearing, demolition of existing structures (rubble), and building construction.

2. Packaging materials including wood, paper and plastic.

3. Scrap or surplus building materials including scrap metals, rubber, plastic, glass pieces and masonry products.

4. Domestic wastes including food containers such as beverage cans, coffee cups, paper bags, plastic wrappers, and cigarettes.

5. Construction wastes including brick, mortar, timber, steel and metal scraps, pipe and electrical cuttings, non-hazardous equipment parts, styrofoam and other materials, transport and package construction materials.

Implementation

The following steps will help keep a clean site and reduce stormwater pollution:

Select designated waste collection areas onsite.

Inform trash-hauling contractors that you will accept only watertight dumpsters for onsite use.

Inspect dumpsters for leaks and contact the trash hauling contractor to repair any dumpster that is not watertight.

Provide an adequate number of containers with lids or covers that can be placed over the container to keep rain out or to prevent loss of wastes when it is windy.

Plan for additional containers and more frequent pickup during the demolition phase of construction.

Collect site trash daily, especially during rainy and windy conditions.

Remove this solid waste promptly since erosion and sediment control devices tend to collect litter.

Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.

Do not hose out dumpsters on the construction site. Leave dumpster cleaning to the trash hauling contractor offsite.

Arrange for regular waste collection before container overflow.

Clean up immediately if a container does spill.

Make sure that construction waste is collected, removed, and disposed of only at authorized disposal areas.

Collection Storage and Disposal

Littering on the project site should be prohibited.

To prevent clogging of the storm drainage system, litter and debris removal from drainage grates, trash racks and ditch lines should be a priority.

Trash receptacles should be provided and located by the general contractor and instruct all personnel on site to properly use the appropriate trash receptacle.

Litter from work areas within the construction limits of the project site should be collected and placed in watertight dumpsters at least weekly, regardless of whether the litter was generated by the contractor, the public, or others. Collected litter and debris should not be placed in or next to drain inlets, stormwater drainage systems, or watercourses.

Dumpsters of sufficient size and number should be provided to contain the solid waste generated by the project.

Full dumpsters should be removed from the project site and the contents should be disposed of by the trash hauling contractor.

Construction debris and waste should be removed from the site biweekly or more frequently as needed.

Stormwater runoff should be prevented from contacting stored solid waste through the use of berms, dikes, or other temporary diversion structures or through the use of measures to elevate waste from site surfaces.

Solid waste storage areas should be located at least 50 ft. from drainage facilities and watercourses and should not be located in areas prone to flooding or ponding.

Inspection and Maintenance

Inspect and verify that activity based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly to verify continued BMP implementation.

Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.

Inspect construction waste area regularly.

Arrange for regular waste collection.

Concrete Washout

The following steps will help reduce stormwater pollution from concrete wastes:

Discuss the concrete management techniques in this BMP (such as handling of concrete waste and washout) with the ready-mix concrete supplier before any deliveries are made.

Incorporate requirements for concrete waste management into material supplier and subcontractors agreements.

Store dry and wet materials away from drainage areas.

Avoid mixing excess amounts of fresh concrete.

Perform washout of concrete trucks offsite or in designated areas only.

Do not washout concrete trucks into storm drains, open ditches, streets or streams.

Do not allow excess concrete to be dumped onsite, except in designated areas.

For onsite washout:
– Locate washout area at least 50 feet from storm drains, open ditches, or water bodies.
– Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
– Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed of properly.
– Avoid creating runoff by draining water to a bermed or level area when washing concrete to remove fine particles and expose the aggregate.
– Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile or dispose in the trash.

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ISSUE	DATE	FOR
	4-08-08	WESTFIELD T.A.C.

CUSTOM CAST STONE
734 EAST 169TH STREET
WESTFIELD, INDIANA 46074

STORMWATER POLLUTION PREVENTION PLAN
NEW BUILDING FOR
INDIANA BRICK
OAKRIDGE ROAD
WESTFIELD, INDIANA

DRAWN BY: CPW
CHECKED BY: ALD
PROJECT No. 0802-031
SHEET No. C7

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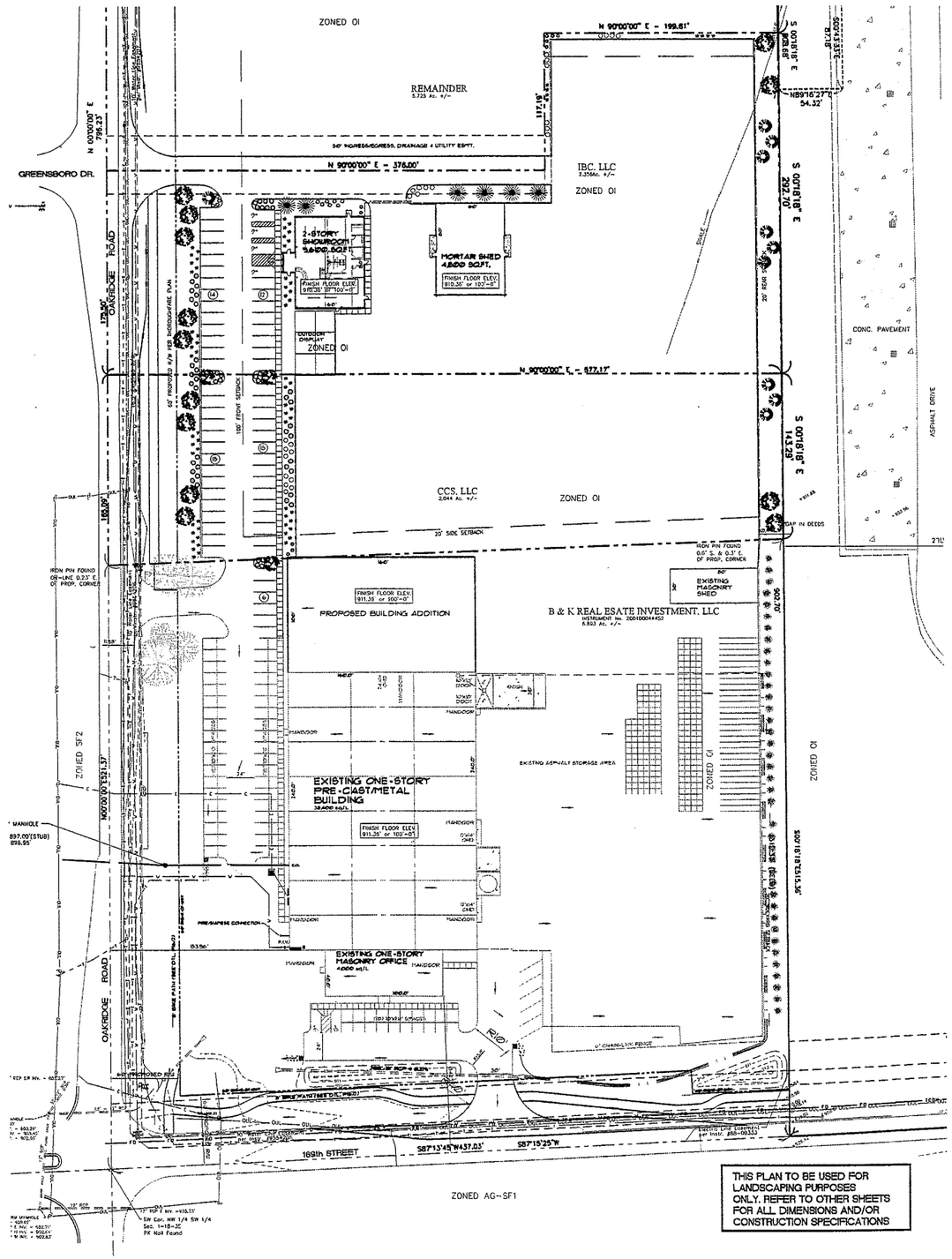
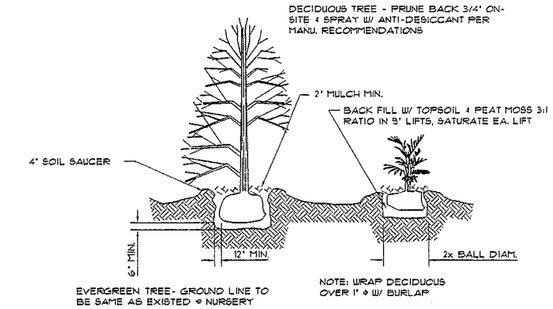


THIS PLAN TO BE USED FOR LANDSCAPING PURPOSES ONLY. REFER TO OTHER SHEETS FOR ALL DIMENSIONS AND/OR CONSTRUCTION SPECIFICATIONS



NOTES.
1. FOR POORLY DRAINED SOILS PLANT ROOT BALL 1/3 ABOVE EXISTING GRADE.
2. SLOPE GRADE AWAY FROM ROOTS TO 2x DIAMETER OF ROOT BALL.
3. PLANT TREES SO THAT THE ROOT FLARE IS AT GRADE.
4. TRUNK WRAP SENSITIVE TREES, ONLY.
5. WATER TREES WITH 1 1/2" OF WATER @ TIME OF PLANTING.
6. BACKFILL TO 2x THE DIAMETER OF THE ROOT BALL WITH SUITABLE TOPSOIL.
7. REMOVE ALL STRING AND TWINE, ROLL BURLAP DOWN INTO HOLE.
8. SLOPE SIDES OF HOLE TO 2x THE ROOT BALL DIAMETER.
9. EXCAVATE NECESSARY SOILS TO STABILIZE PLANTING TO PREVENT TIPPING OVER.

PLANTING DETAILS FOR TREES & SHRUBS

1 / L1

NOT TO SCALE

TREE AND SHRUB PLANTING SCHEDULE

KEY	SCIENTIFIC NAME	COMMON NAME	SIZE	ROOTING	SPACING	QUANTITY
TY	TAXUS x m 'DENSIFORMIS'	DENSE YEW	24"	BALL & BURLAP	AS SHOWN	69
BS	JUNIPERUS SC WICHITA BLUE	UPRIGHT JUNIPER	3@" HIGH	BALL & BURLAP	AS SHOWN	10
CB	PINUS PUNGENS GLAUCA	COLORADO BLUE SPRUCE	6'	BALL & BURLAP	AS SHOWN	6
AM	ACER 'BOW HALL'	BOW HALL RED MAPLE	2" cal. 8' HIGH	WIREBALL	AS SHOWN	3
BA	BERBERIS t 'AUREA'	GOLDEN BARBERRY	24"	BALL & BURLAP	4' o.c.	32
SM	ACER SACCRUM	SUGAR MAPLE	2" cal. 8' HIGH	BALL & BURLAP	AS SHOWN	13
NS	PICEA ABIES	NORWAY SPRUCE	10'-12'	BALL & BURLAP	AS SHOWN	10
GA	THUJA OCCIDENTALIS 'WOODWARD1'	GLOBE ARBORVITAE	24"	BALL & BURLAP	AS SHOWN	7
JH	JUNIPERUS COMMUNIS	COMMON JUNIPER	18"	BALL & BURLAP	AS SHOWN	26

NOTES:
1. ALL GREEN AREAS SHALL HAVE A MINIMUM OF 4" OF TOPSOIL. MULCH SEEDING SHALL BE INSTALLED IN SUCH A WAY AS TO NOT ERODE AWAY.
2. PLANTING AREAS AND TREE LOCATIONS SHALL HAVE MULCH 3" DEEP (MINIMUM).
3. ALL MULCH SEEDING AREAS SHALL BE LOOSENED TO A MINIMUM DEPTH OF 3" BEFORE FERTILIZER AND SEED ARE INSTALLED.
4. ALL TREES SHALL BE STAKED.
5. ALL EXTERIOR MECHANICAL EQUIPMENT SHALL BE SCREENED WITH LANDSCAPING.

LANDSCAPE/EXT. LIGHTING PLAN

GRAPHIC SCALE

0 50 75 100 150 250

(IN FEET)
1 inch = 50 ft.

ISSUE	FOR
DATE	WESTFIELD T.A.C.
4-08-08	

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CUSTOM CAST STONE
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LANDSCAPE / EXTERIOR LIGHTING PLAN

NEW BUILDING FOR INDIANA BRICK
OAKRIDGE ROAD
WESTFIELD, INDIANA

DRAWN BY: CPW
CHECKED BY: ALD

PROJECT No. 0802-031

SHEET No. L1

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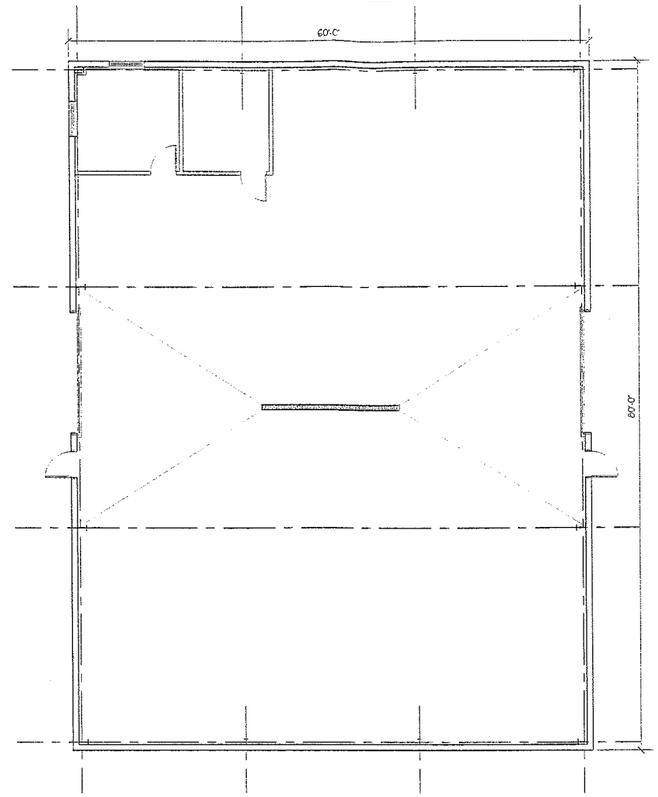
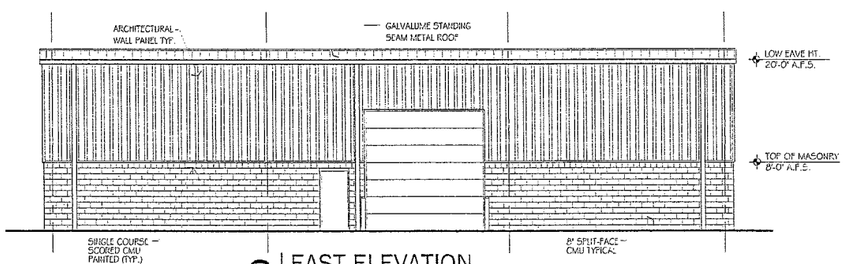
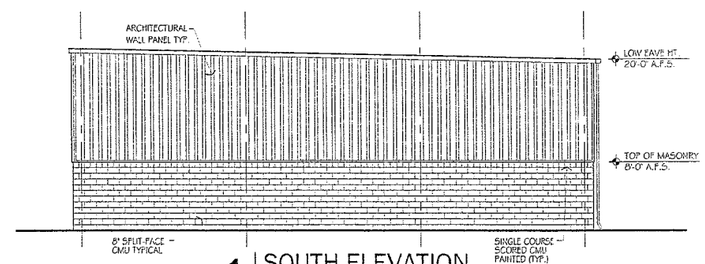


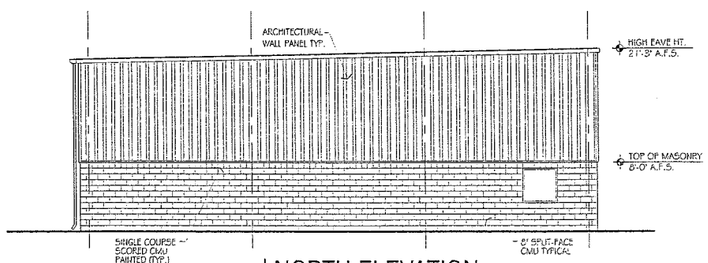
1 FLOOR PLAN
SCALE: 1/8" = 1'-0"



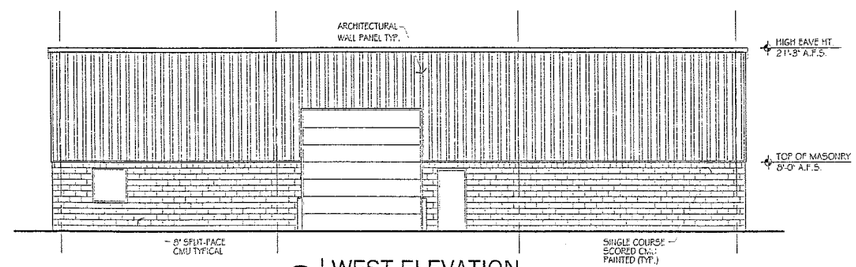
2 EAST ELEVATION
SCALE: 1/8" = 1'-0"



1 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



3 WEST ELEVATION
SCALE: 1/8" = 1'-0"

DAC
DESIGN AND CONSTRUCTION, LLC.
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FAX: (317) 867-3399

SEAL

NEW 4,800 S.F. STORAGE SHED

INDIANA BRICK MORTAR SHED

WESTFIELD, INDIANA 46074

ISSUED FOR REVIEW
APRIL 8, 2008

REVISIONS:
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FLOOR PLAN ELEVATIONS

A1.0

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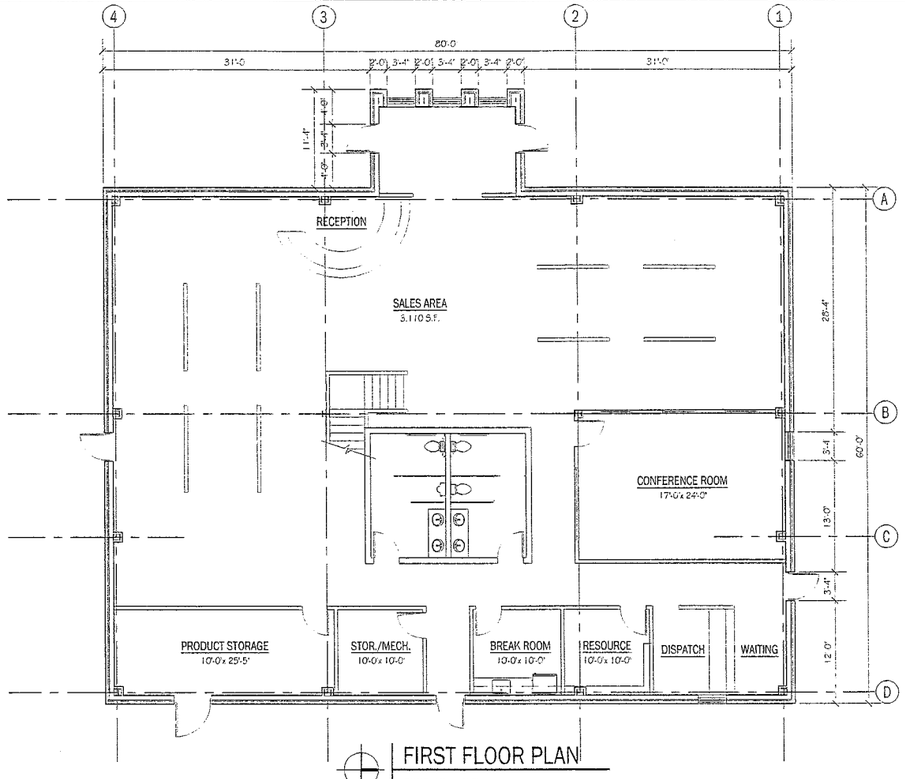
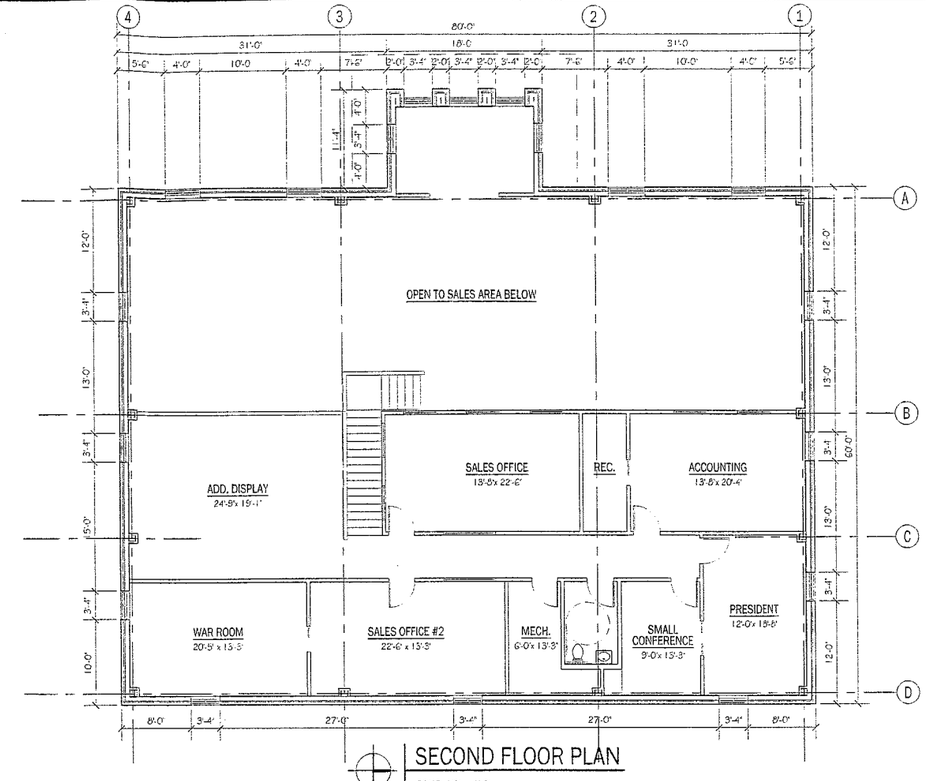
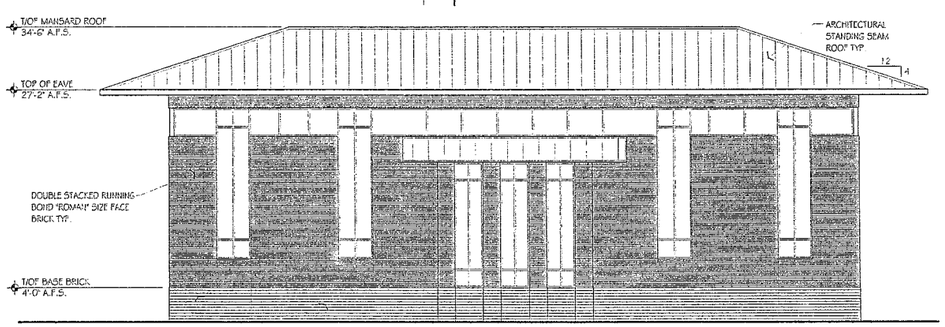


FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



1 WEST ELEVATION
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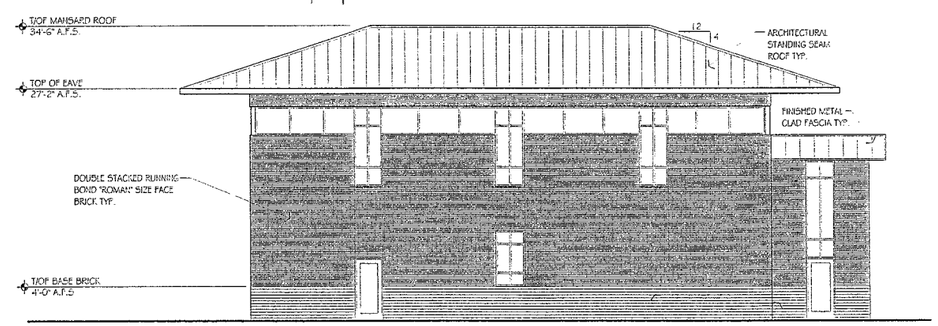

2 NORTH ELEVATION
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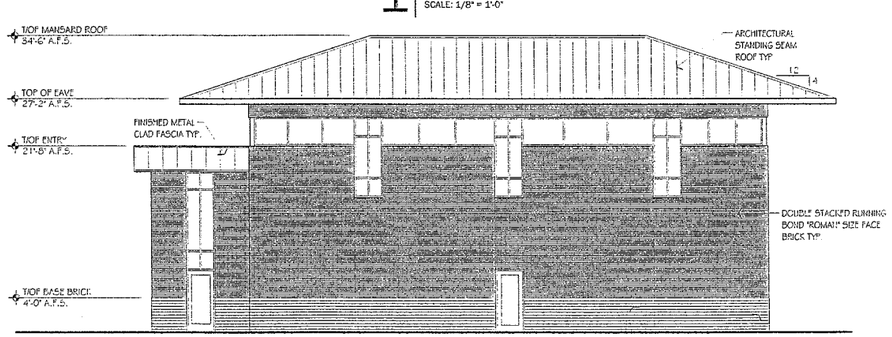
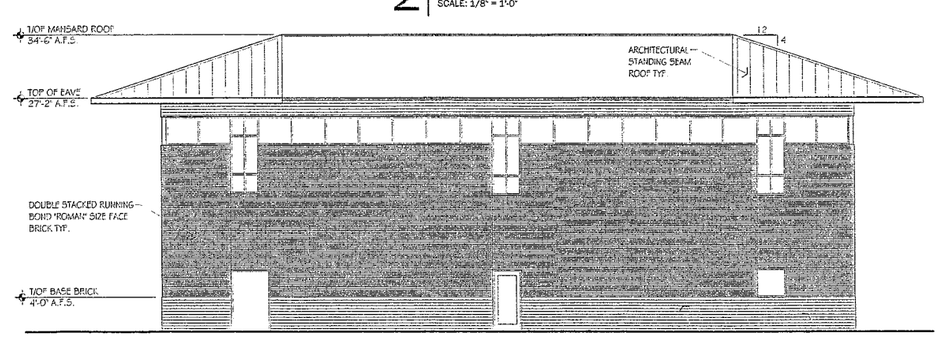


3 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 EAST ELEVATION
SCALE: 1/8" = 1'-0"

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SEAL

NEW 7,681 S.F. CORPORATE HEADQUARTERS

INDIANA BRICK CORPORATION

734 EAST 169TH STREET
WESTFIELD, INDIANA 46074

ISSUED FOR REVIEW
APRIL 8, 2008

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FLOOR PLANS
ELEVATIONS

A1.9

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