



**#2010-51**

**Chase Bank – 1185 S. Route 31 Lutter Center  
Project Review for Planning and Zoning Commission**

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**Meeting Dates:** September 1, 2010 and September 15, 2010

**Requests:**

1. Preliminary and Final Planned Unit Development to allow the construction of a financial institution
2. Variations from:
  - A. Article 4-200 D 5 to allow the parking to exceed the maximum of 125% of the required parking spaces and not utilize impervious materials,
  - B. Article 4-1000 Table 4-1000 E 1 to allow wall signage to exceed the maximum of 150 square feet to allow 202.51 square feet,
  - C. Article 4-1000 Table 4-1000 E 1 to allow a free-standing sign to exceed the maximum 5 feet in height and 32 square feet to allow a sign 24 feet in height and 99 square feet.

**Location:** 1185 South Route 31 (Lutter Center)

**Acreage:** Approximately 1.6 acres

**Existing Zoning:** B-2 PUD General Commercial

**Surrounding Properties:**

North:	B-2 PUD General Commercial (Central Park retail)
South:	Village of Cary
East:	B-2 PUD General Commercial (Wal-Mart Supercenter)
West:	B-2 PUD General Commercial (nursery)

**Staff Contact:** Elizabeth Maxwell (815.356.3615)

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**Background:**

The subject property is a vacant 1.6 acre lot in front of the Wal-Mart Supercenter. Chase Bank is proposing constructing a new branch location on this site. This site is part of the Lutter Center PUD and requires a preliminary and final PUD approval. The petitioners are requesting the preliminary and final PUD approval as well as variations to the parking and signage requirements.

## **Land Use Analysis:**

### Site

The new branch building would be placed within the center of the lot. Access to the site will be from the existing frontage road from Central Park Drive or the adjacent right-in/right-out drive from Route 31. Full two-way access is provided around the site including a bypass lane around the drive-through lanes. The front of the bank will face Route 31. The drive-through is located on the south side of the bank which will be visible from Route 31. There are 3 drive-through lanes and 1 drive-through ATM lane.

### Parking

The site is providing 48 parking spaces located on the north and west sides of the building. Financial Institutions with a drive-through are required to provide 1 parking space per 350 gross square feet of building space. At 4,214 the Chase Bank is only required to provide 12 parking spaces. The UDO allows for parking lots to be oversized and any parking lot that provides over 125% of the required parking should do so with pervious materials. Thirty-three of the parking spaces should be of pervious material, which could include pervious asphalt or interlocking pervious paver blocks with gaps filled with fine gravel. The overall impervious coverage is 59%; 65% impervious is permitted. The reduction in the parking area would allow the engineer to better design for water management BMP's.

### Landscape

The site has landscape planned for the perimeter within the berm around the west and south sides and the islands on the north and east sides. Foundation base landscape would be a variety of small ground shrubs and flowers. The trash enclosure and transformer are located in the rear of the building and will be screened with deciduous and evergreen plants. The site is located within the Village of Cary's groundwater recharge area. The site will need to be designed with BMP's. These BMP's shall be incorporated within the proposed landscape or handled mechanically.

### Elevations/Signage

The building is designed with a CMU base, brick main wall area and EIFS top portion. The building has a flat roof with a peaked roof above the front center portion of the building. This building is adjacent to the Central Park inline retail buildings and the Wal-Mart Supercenter. Wal-Mart selected Sand and Cream for their EIFS colors with Promenade Blend for the brick and a deep brown colored CMU. Chase Bank is selecting White CMU for the base, Red Sunset colored bricks and Decorous Amber as the EIFS color. Material samples are required to ensure that the Chase Bank color selections will blend well with the Wal-Mart center appearance.

Since this lot is the gateway to the City, a high quality of architecture is required. Both the Central Park inline retail buildings and the Wal-Mart have column elements. The Chase Bank building should also create more defined column elements. Additional architectural elements or details should be added to the drive-through canopy so it is better integrated with the building's architecture. The window bays shall be recessed or have larger headers and sills to provide additional detail around them.

The signage requested is 202.51 square feet and includes the main Chase sign and logos as well as the signage on the drive-through canopy. Stand-alone buildings are permitted up to 150 total square feet of building signage. Chase is requesting a 52.51 square foot variation. Chase is proposing a 4-foot wide 24-foot tall free-standing sign. The UDO permits signs for office tenants to be 5-feet high and 32 square feet. This is a variation of 19 feet in height and 67 square feet. All proposed signage should meet the UDO requirements.

**Findings of fact:**

**Preliminary and Final Planned Unit Development**

The petitioner is requesting approval of a Preliminary and Final Planned Unit Development to allow the construction of the financial institution in the B-2 PUD zoning district. A Planned Unit Development is a Special Use and Special Uses require separate review because of their potential to impact surrounding properties and the orderly development of the City.

Section 2-400 B General Standards for all special uses in the Unified Ordinance establishes standards for all special uses in Crystal Lake. Briefly, the criteria are as follows:

1. The use is necessary or desirable, at the proposed location, to provide a service or facility which will further the public convenience and general welfare.  
 *Meets*             *Does not meet*
2. The use will not be detrimental to area property values.  
 *Meets*             *Does not meet*
3. The use will comply with the zoning districts regulations.  
 *Meets*             *Does not meet*
4. The use will not negatively impact traffic circulation.  
 *Meets*             *Does not meet*
5. The use will not negatively impact public utilities or municipal service delivery systems. If required, the use will contribute financially to the upgrading of public utilities and municipal service delivery systems.  
 *Meets*             *Does not meet*
6. The use will not negatively impact the environment or be unsightly.  
 *Meets*             *Does not meet*
7. The use, where possible will preserve existing mature vegetation, and provide landscaping and architecture, which is aesthetically pleasing, compatible or complementary to surrounding properties and acceptable by community standards.  
 *Meets*             *Does not meet*

8. The use will meet requirements of all regulating governmental agencies.  
 *Meets*             *Does not meet*
9. The use will conform to any conditions approved as part of the issued Special Use Permit.  
 *Meets*             *Does not meet*
10. The use will conform to the regulations established for specific special uses, where applicable.  
 *Meets*             *Does not meet*

In addition PUDs must also meet the standards in Section 4-500 C. Development Standards and 4-500 D. 2 Additional standards for Planned Unit Developments Commercial PUDs.

1. Implements the vision and land use policies of the Comprehensive Plan.  
 *Meets*             *Does not meet*
2. Shall not result in substantial adverse effect on adjacent property, natural resources, infrastructure, public sites or other matter of public health, safety and welfare.  
 *Meets*             *Does not meet*
3. PUD's must provide transitional uses to blend with adjacent development.  
 *Meets*             *Does not meet*
4. PUD phases must be logically sequenced.  
 *Meets*             *Does not meet*
5. The density and intensity of a PUD shall be in accordance with the Comprehensive Plan.  
 *Meets*             *Does not meet*
6. All dimensional standards shall be listed within the PUD plan if they do not meet the Ordinance minimum standards.  
 *Meets*             *Does not meet*
7. The responsible parties for all on-site and other required public improvements shall be established and a utility plan indicating all proposed easements shall be provided.  
 *Meets*             *Does not meet*
8. Any private infrastructure shall comply with the city standards.  
 *Meets*             *Does not meet*
9. The PUD plan shall establish the responsibility of the applicant/developer.  
 *Meets*             *Does not meet*
10. A bond or letter of credit shall be posted to cover required fees or public improvements.  
 *Meets*             *Does not meet*

### **Planned Unit Development Variations**

The purpose of Planned Unit Developments is to encourage and allow more creative and imaginative design of land developments than is possible under district zoning regulations. Planned Unit Developments are, therefore, intended to allow substantial flexibility in planning and designing a proposal. This flexibility is often in the form of relief from compliance with conventional zoning ordinance site and design requirements.

Ideally, this flexibility results in a development that is better planned, contains more amenities, and is ultimately more desirable than one that would have been produced through compliance with typical zoning ordinance and subdivision controls.

Therefore more lenient site requirements may be granted where the Planned Unit Development contains features not normally required of traditional developments. If the evidence is not found to justify such conditions, that fact shall be reported to the City Council with a recommendation that the variation request be lessened or denied.

The petitioner is asking for two variations in conjunction with their PUD request. The first is to allow the parking to exceed 125% of the required parking and not utilize impervious materials. This variation goes against the ideals of a PUD which require creative and imaginative design. Staff would require that data be provided to the City illustrating the total number of employees on shift and number of customers per hour to support a higher parking need. Staff can then reevaluate the parking and any parking exceeding the 125% shall be constructed of pervious materials.

The second requested variation is for the wall and free-standing signs. Staff would recommend that any proposed signage meet the requirements of the UDO.

### **Recommended Conditions:**

A motion to recommend approval of the petitioner's request with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
  - A. Application (Tim Meseck, The Architects Partnership, received 08/18/10)
  - B. Alta Survey (Gewalt Hamilton, dated 08/09/10, received 08/10/10)
  - C. Engineering plans (Gewalt Hamilton, dated 08/09/10, received 08/10/10)
  - D. Elevations (The Architects Partnership, dated 06/29/10 received 08/10/10)
  - E. Photometric Plan (The Architects Partnership, dated 06/29/10 received 08/10/10)
  - F. Landscape Plan (The Architects Partnership, dated 08/06/10 received 08/10/10)
  - G. Floor Plan (The Architects Partnership, dated 06/29/10 received 08/10/10)
  - H. Site Plan (The Architects Partnership, dated 06/29/10 received 08/10/10)
2. The requested parking variation shall be eliminated:
  - A. Chase Bank shall provide additional data on the total number of employees on shift and customers per hour that support a higher parking requirement.
  - B. Any parking provided above the 125% required shall be constructed of pervious materials.

3. Site Plan
  - A. The site plan shall be amended per Wal-Mart's driveway requirement and Engineering's comments. This shall shift the driveway further south away from the right-in/right-out access from Route 31 and increase the opening radius.
4. Architecture
  - A. Material samples shall be presented to the Planning and Zoning Commission and City Council and shall resemble the current Wal-Mart colors and materials.
  - B. The window bays shall be recessed into the elevation to provide additional relief and interest to the elevation. If they cannot be recessed larger headers and sills shall be incorporated around the window and door openings to provide the architectural details.
  - C. An additional top element shall be added to the drive-through canopy to finish off the canopy and provide integration with the building elevations.
  - D. Column features shall be added around all four sides of the building to emulate the Wal-Mart center.
  - E. The rear man door shall be a 6-panel decorative door.
5. Signage
  - A. The building wall signage shall be reduced in square footage to meet the total of 150 square feet of signage.
  - B. No signage shall be placed on the drive-up ATM machine with the exception of any legally required or instructional signage.
  - C. The directional signage shall meet the UDO requirements and shall not exceed 3-feet in height and 4 square feet.
  - D. The free-standing sign shall be reduced to 5-feet in height and 32 square feet. The monument base shall include materials from the building.
6. The petitioner shall address all of the review comments and requirements of the Engineering and Building, Fire Rescue, Police, Public Works, and Planning and Economic Development Departments.

# City of Crystal Lake Development Application

Office Use Only

File # 512010

Project Title: CHASE CRYSTAL LAKE

## Action Requested

- |   |  |
|---|--|
| <input type="checkbox"/> Annexation                   | <input type="checkbox"/> Preliminary PUD                 |
| <input type="checkbox"/> Comprehensive Plan Amendment | <input type="checkbox"/> Preliminary Plat of Subdivision |
| <input type="checkbox"/> Conceptual PUD Review        | <input type="checkbox"/> Rezoning                        |
| <input type="checkbox"/> Final PUD                    | <input type="checkbox"/> Special Use Permit              |
| <input type="checkbox"/> Final PUD Amendment          | <input type="checkbox"/> Variation                       |
| <input type="checkbox"/> Final Plat of Subdivision    | <input type="checkbox"/> Other                           |

RECEIVED  
AUG 16 2010

## Petitioner Information

Name: Tim Meseck  
Address: 122 S. Michigan Ave  
Suite 1810  
Phone: 312-583-9800\*44  
Fax: 312-583-9890  
E-mail: meseck@tapchicago.com

## Owner Information (if different)

Name: JP Morgan Chase-Mike Metzger  
Address: 131 S. Dearborn 5th floor  
Phone: 312-325-3373  
Fax: -  
E-mail: michael.a.metzger@chase.com

## Property Information

Project Description: New ground up JP Morgan Chase Bank (1) story brick building with attached drive thru, new site plan and parking

Project Address/Location: 1205 S. Illinois Route 31 Crystal Lake, IL

PIN Number(s): 19-15-203-006

**Development Team**

Please include address, phone, fax and e-mail

Developer: \_\_\_\_\_

The Architects Partnership 312-583-9800\*44

Architect: Fax: 312-583-9890 meseck@tapchicago.com \_\_\_\_\_

Attorney: \_\_\_\_\_

GHA Gewalt Hamilton 847-478-9700

Engineer: Fax: 847-478-9701 ddixon@gha-engineers.com \_\_\_\_\_

3D Design Studio 847-223-1891

Landscape Architect: Fax: 847-223-1892 cmost@3ddesign.com \_\_\_\_\_

Planner: \_\_\_\_\_

GHA Gewalt Hamilton 847-478-9700

Surveyor: Fax: 847-478-9701 ddixon@gha-engineers.com \_\_\_\_\_

Other: \_\_\_\_\_

**Signatures**

8/10/2010

PETITIONER: Print and Sign name (if different from owner)

Date

As owner of the property in question, I hereby authorize the seeking of the above requested action.

MICHAEL A. METZGER

8/10/2010

OWNER: Print and Sign name

Date

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.



**PUBLIC NOTICE**

**BEFORE THE PLANNING AND  
ZONING COMMISSION  
OF THE CITY OF CRYSTAL LAKE,  
MCHENRY COUNTY, ILLINOIS**

IN THE MATTER OF THE PETITION  
OF JP Morgan Chase Bank

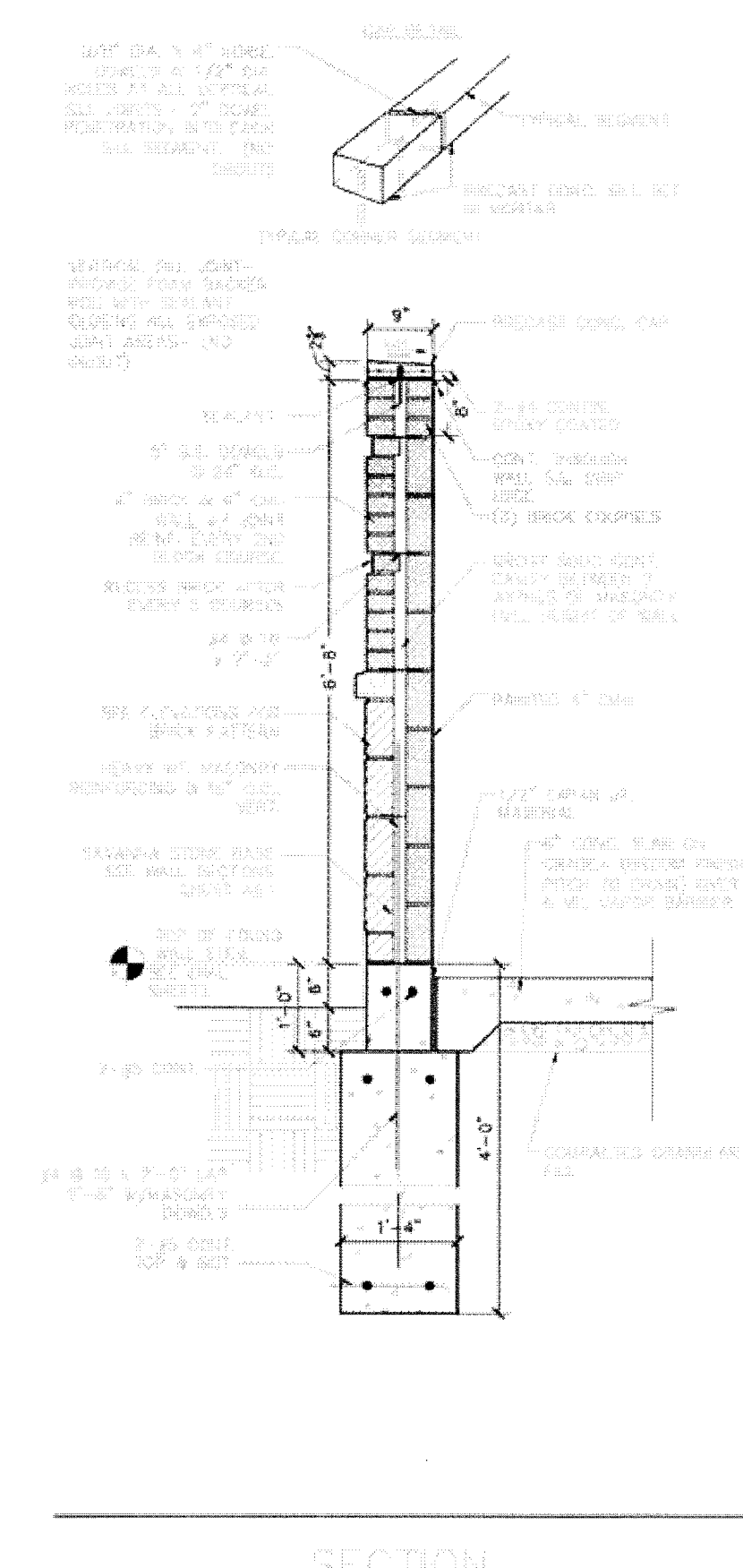
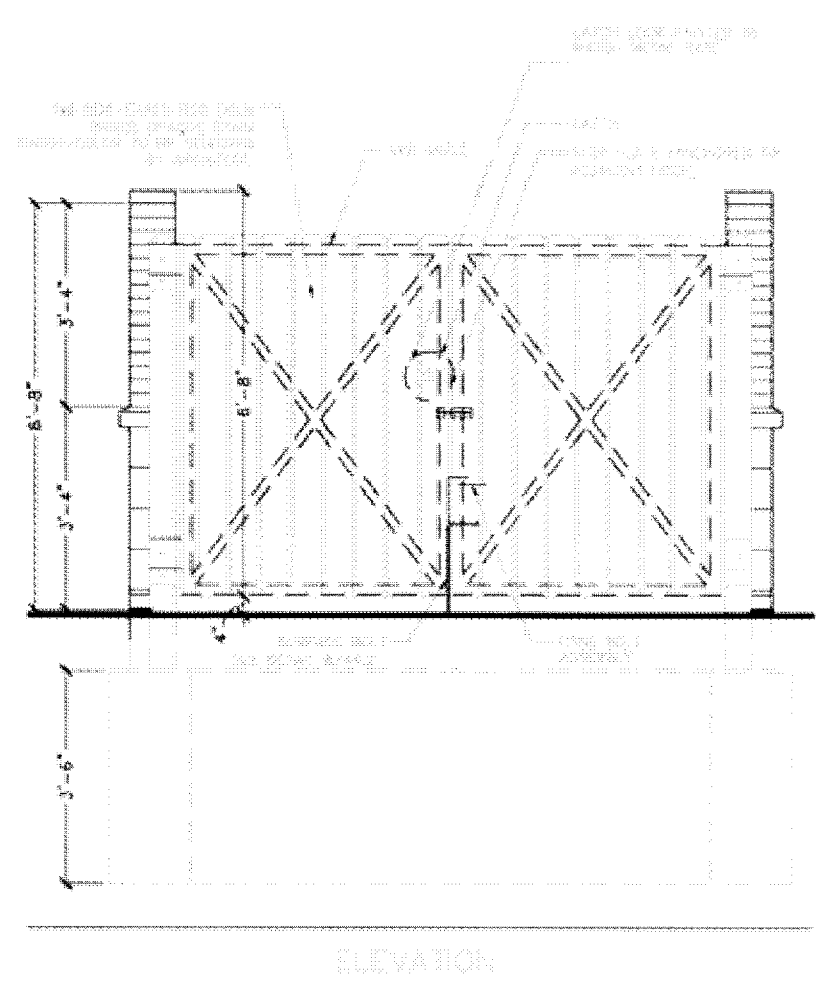
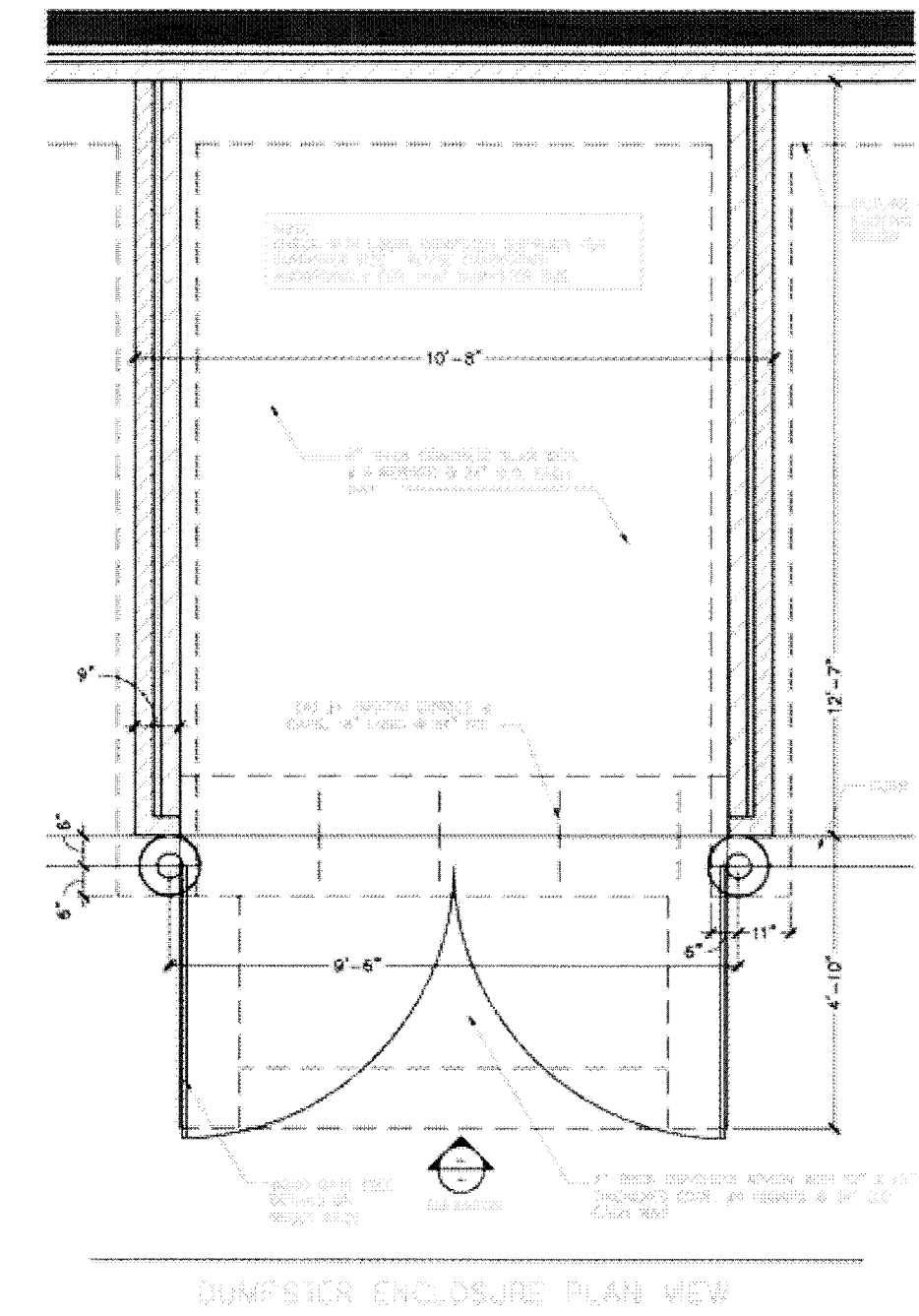
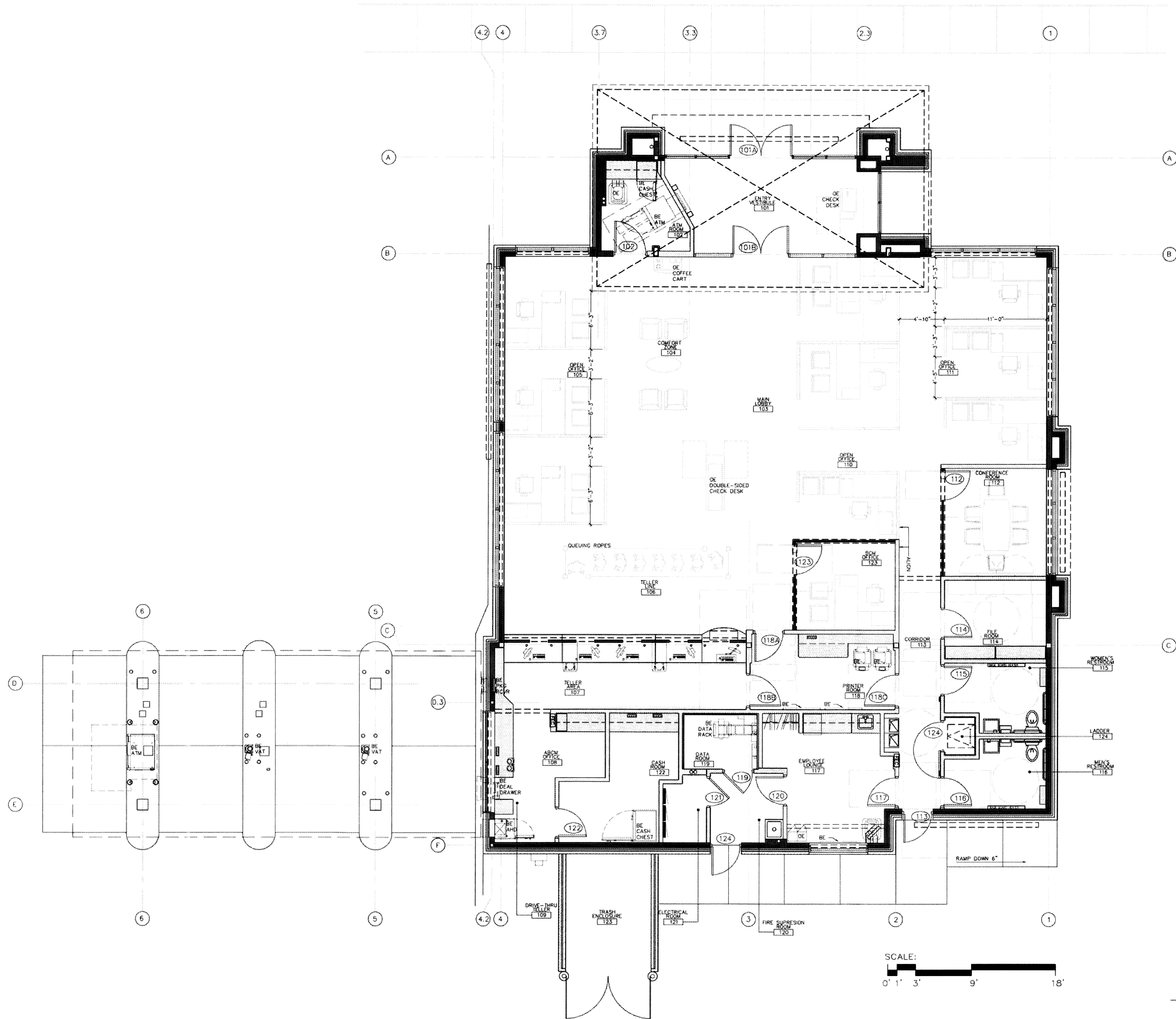
**LEGAL NOTICE**

Notice is hereby given in compliance with the Unified Development Ordinance of the City of Crystal Lake, Illinois that a public hearing will be held before the Planning and Zoning Commission of the City of Crystal Lake upon the application by The Architects Partnership on behalf of JP Morgan Chase Bank, for a Planned Unit Development Amendment relating to the real estate commonly known as 1185 S. Route 31, commonly known as the Wal-Mart Outlet in the Lutter Center, Crystal Lake, Illinois PIN: 19-15-203-006

This application is filed for the purposes of seeking a Preliminary and Final Planned Unit Development approval to allow a financial institution with drive-through, a variation from Article 4-200 D 5, to allow the parking to exceed the maximum of 125% of the required spaces and not utilize impervious materials, a variation from Article 4-1000 Table 4-1000 E 1 to allow wall signage to exceed the maximum of 150 square feet to allow 202.51 square feet and to allow a free-standing sign to exceed the maximum permitted height of 5 feet and maximum square footage of 32 square feet to allow a 24 feet high sign at 99.96 square feet, and any other variations as necessary to approve the application as presented. Plans for this project can be viewed at the City of Crystal Lake Community Development Department at City Hall.

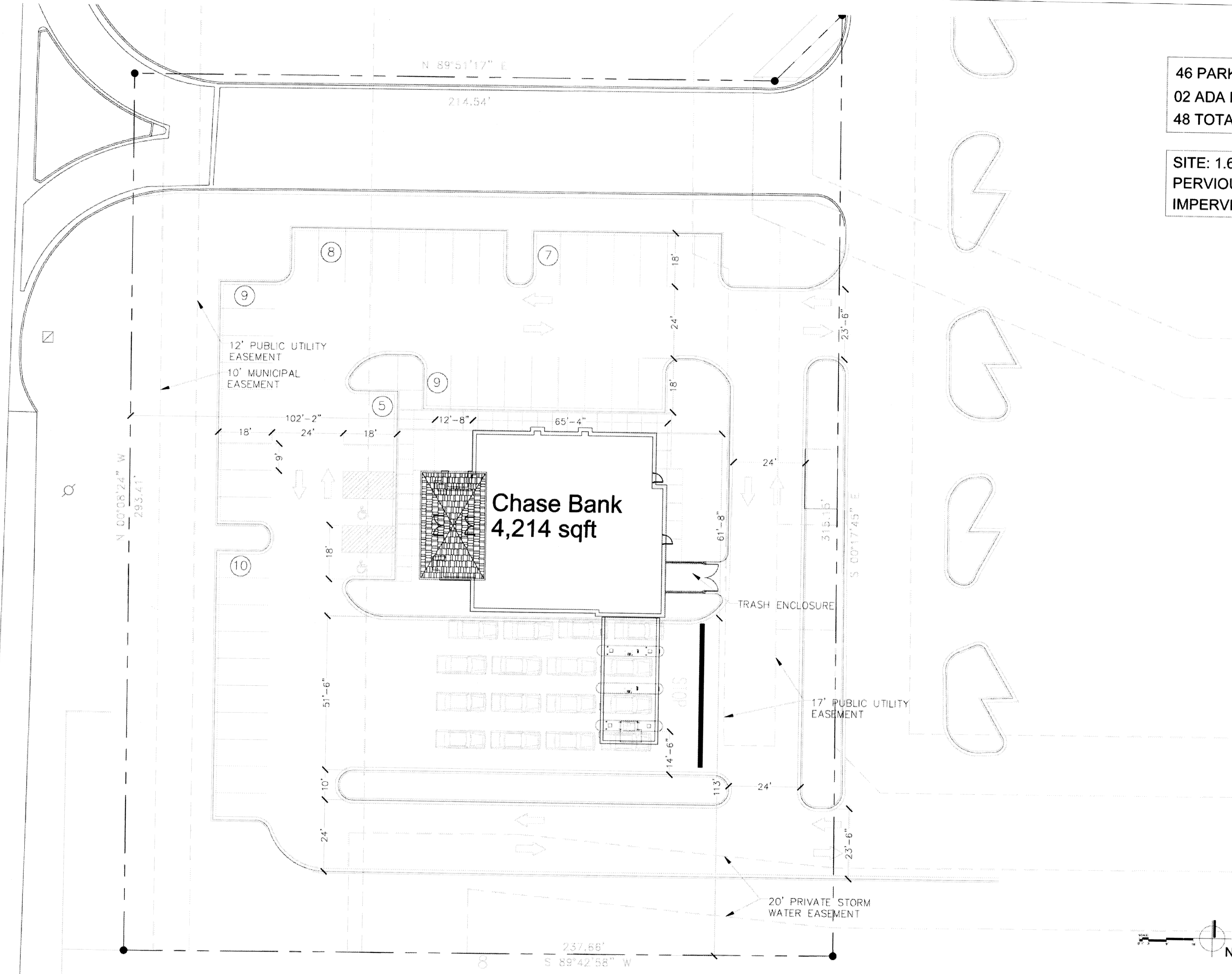
A public hearing before the Planning and Zoning Commission for this request will be held at 7:30 p.m. on Wednesday September 15, 2010, at the Crystal Lake City Hall, 100 West Woodstock Street, at which time and place any person determining to be heard may be present.

Tom Hayden, Chairperson  
Planning and Zoning Commission  
City of Crystal Lake  
(Published in the Northwest Herald  
August 17, 2010)



46 PARKING SPACES  
 02 ADA PARKING SPACES  
 48 TOTAL PARKING SPACES

SITE: 1.602 ACRES  
 PERVIOUS +/- 28,0556 SQ FT  
 IMPERVIOUS +/- 41,241 SQ FT



**CHASE**  
**CRYSTAL LAKE**  
 1205 S. IL ROUTE 31  
 CRYSTAL LAKE, ILLINOIS

**PROPOSED SITE PLAN**  
 June 29th, 2010

Architect/Designer  
 The Architects Partnership  
 122 South Michigan Avenue  
 Chicago, IL 60603  
 t: 312.583.9800  
 f: 312.583.9890





**SURVEYOR'S CERTIFICATION**

To: Wal-Mart Real Estate Business, Trust, Core States Engineering INC.

This is to certify that this map or plat and the survey on which it is based were made in accordance with the Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS in 2005, and includes items 2 thru 6, 8 thru 10, 11(a), (b) and 19 of Table A thereof. Pursuant to the Accuracy Standards as adopted by ALTA and NSPS and in effect on the date of this certification, undersigned further certifies that in my professional opinion, as a land surveyor registered in the State of Illinois, the Relative Positional Accuracy of this survey does not exceed that which is specified therein and conforms to commitment for Title Insurance File No. 0826246 issued by Lawyers Title Insurance Corporation effective September 26, 2008.

PROPERTY DESCRIBED AS: Lot 2 as designated upon the Final Plat of Resubdivision of Lot 1 of the Final Plat of Lutter Center Subdivision - Unit 1, being a resubdivision of Lot 1 of Final Plat of Lutter Center Subdivision - Unit 1, being a subdivision of part of the Southeast Quarter of Section 10 and part of the North half of the Northeast Quarter of Section 15, all in Township 43 North, Range 8 East of the Third Principal Meridian, the plat of which is recorded as Document No. 2008R0050753 in the Recorder's Office of McHenry County, Illinois, more particularly bounded and described as follows, to-wit:

Beginning at the Southwest corner of said Lot 2; thence North 00°08'24" West along the West line of said Lot 2, a distance of 293.41 feet to the South line of Outlot 3 as designated upon the Final Plat of Lutter Center Subdivision - Unit 1; thence North 89°51'17" East along the South line of said Outlot 3, a distance of 214.54 feet to the Southeasterly line of said Outlot 3; thence North 44°47'07" East along the Southeasterly line of said Outlot 3, a distance of 315.53 feet; thence South 00°17'45" East, a distance of 315.15 feet to the South line of said Lot 2; thence South 89°42'58" West along the South line of said Lot 2, a distance of 237.66 feet to the Point of Beginning, containing 1.602 acres (69,797 square feet), more or less, all being situated in the County of McHenry and the State of Illinois.

I FURTHER STATE that no buildings on the adjacent property encroach on this property and that no buildings on this property encroach on the adjacent property, nor onto any existing utility easements.

I FURTHER STATE that no investigation concerning environmental and subsurface conditions, or for the existence of underground or overhead containers or facilities which may affect the use or development of this property was made as part of this survey.

I FURTHER STATE that the above described property lies within an area designated as Zone X (Areas determined to be outside the 0.2% annual chance floodplain) as identified by the Federal Emergency Management Agency on Flood Insurance Rate Map No. 17111C0335J, effective date November 16, 2006. This map does not necessarily show all areas subject to flooding in the community or all planimetric features outside the special flood hazard areas. This does not guarantee that the surveyed property will or will not flood.

I FURTHER STATE that the contour elevations shown are based on U.S.G.S. Datum and are at one foot intervals.

**SURVEYOR'S NOTES**

- The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from the information available. This surveyor has not physically located the underground utilities.
- Field work completed 08/16/07.
- No buildings on property.
- Property zoned B-3 Planned Business.
- Core States # SAM-7754  
Wal-Mart Store # 1413

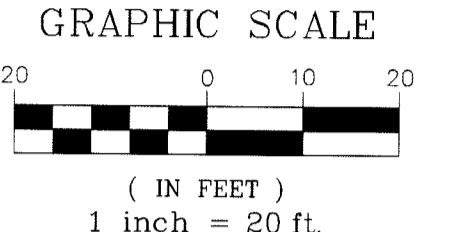
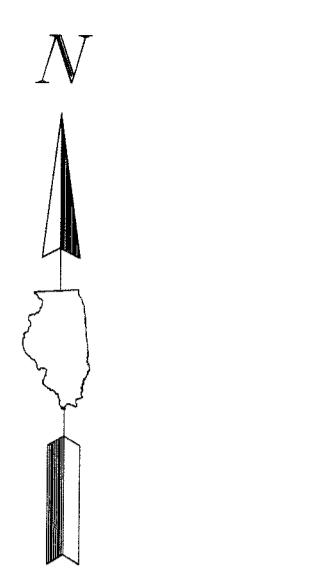
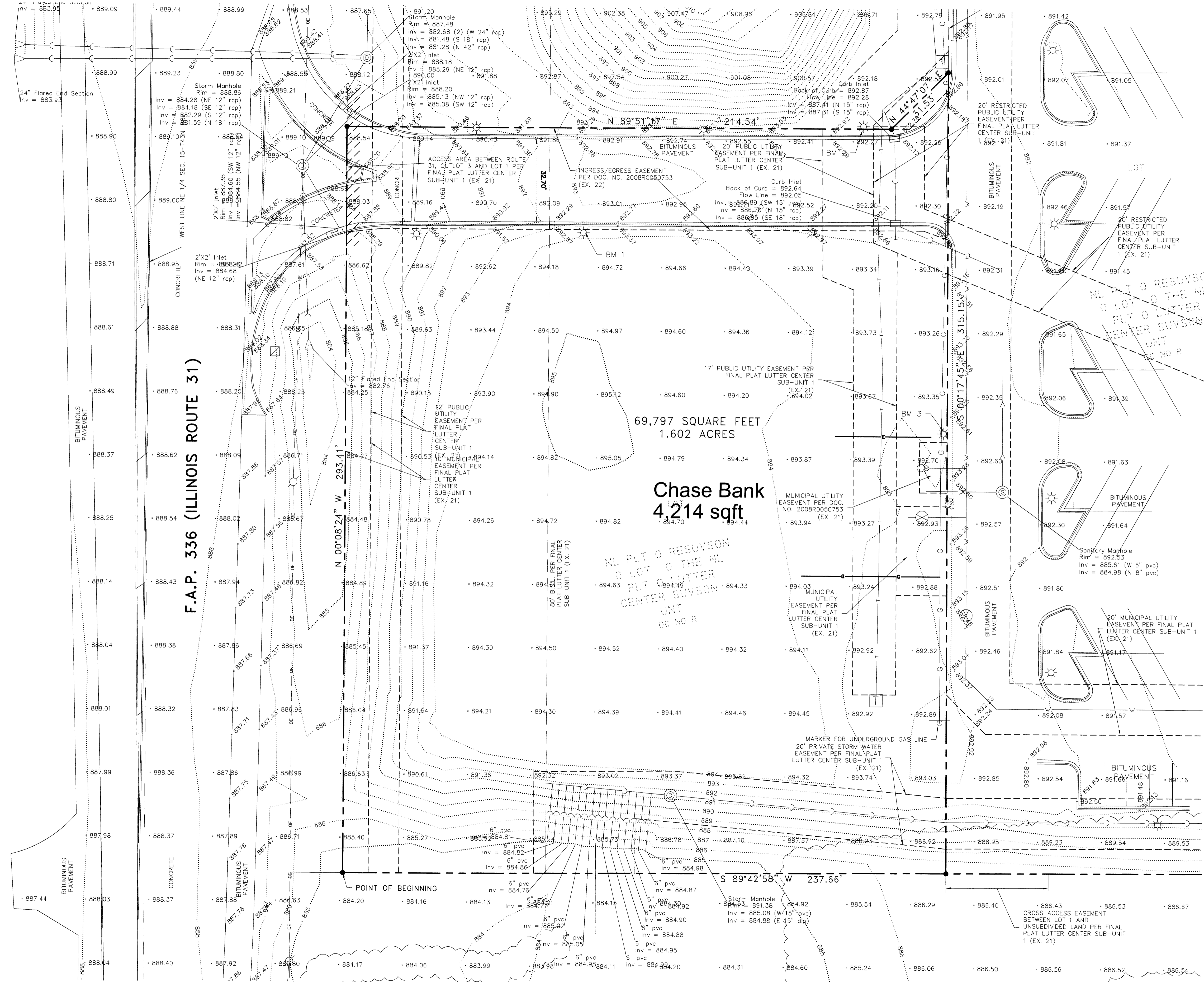
**B-3 ZONING**

Area: 80,000 Sq. Ft.  
Width: 200 Ft.  
Front Yard: 50 Ft.  
Rear Yard: 20 Ft.  
Total Side Yard: N/A  
Minimum Side Yard: N/A  
Side Yard Abutting Street: 50 Ft.  
Abutting Residential Zoning: 50 Ft.  
Lot Coverage: 50%  
F.A.R.: 1.0  
Height of Principal Use: 25 Ft./2 St.  
Height of Accessory Use: 15 Ft./1 St.

**ARC**  
DESIGN  
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AND  
LAND SURVEYING  
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184-001334

# ALTA/ACSM LAND TITLE SURVEY

OF  
LOT 2 OF THE FINAL PLAT OF RESUBDIVISION OF LOT 1 OF THE FINAL PLAT OF LUTTER CENTER SUBDIVISION - UNIT 1, BEING A RESUBDIVISION OF LOT 1 OF FINAL PLAT OF LUTTER CENTER SUBDIVISION - UNIT 1, BEING A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 10 AND PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 15, ALL IN TOWNSHIP 43 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, MCHENRY COUNTY, ILLINOIS



**LEGEND**

- Utility Pole
- ★ Light Pole
- Overhead Utility Line
- Gas Main
- Telephone Line
- Telephone Pedestal
- Water Main
- ⊗ Valve Box/Valve and Vault
- ⊕ Fire Hydrant
- Sanitary Sewer
- ⊙ Sanitary Manhole
- Storm Sewer
- Metal End Section
- Storm Manhole
- Curb Inlet Type 700
- Sign
- Handhole
- Property Line
- Existing Right-of-Way Line
- Building Setback Line (B.S.L.)
- Section Line
- Easement Line
- Contour Line
- 750
- Set 3/4" Pin
- Measured Distance
- Tree Line

**BENCHMARKS**

DESCRIPTION	ELEVATION (UGSS)
<b>BENCHMARK 1</b> CHISELED SQUARE ON LIGHT POLE BASE AT NORTHWEST CORNER OF SITE	893.75
<b>BENCHMARK 2</b> CHISELED SQUARE ON LIGHT POLE BASE AT NORTHEAST CORNER OF SITE	895.22
<b>BENCHMARK 3</b> CHISELED SQUARE ON LIGHT POLE BASE ON EAST LINE OF SITE	893.56

**GHA** GEWALT HAMILTON  
ASSOCIATES, INC.  
850 Forest Edge Drive • Vernon Hills, IL 60061  
TEL 847.478.9700 • FAX 847.478.9701

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This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

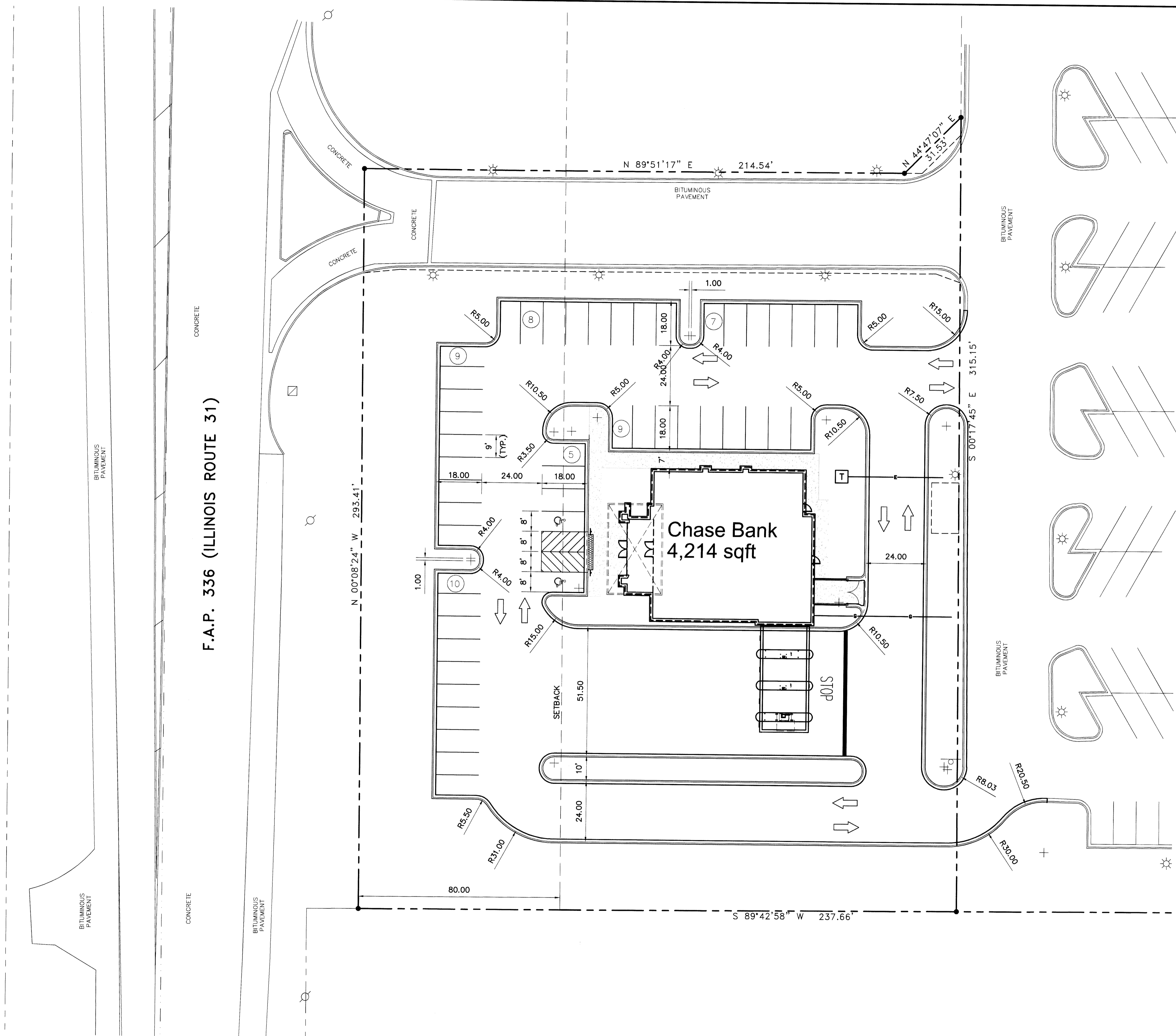
**EXISTING CONDITIONS**

**CHASE BANK**  
F.A.P. 336 (IL. RT. 31)  
CRYSTAL LAKE, IL

NO.	BY	DATE	REVISION

FILE: 3619.024_Pre-01.dwg	SHEET NUMBER:
DRAWN BY: AV	GHA PROJECT #
DATE: 08/09/10	3619.024
CHECKED BY: DD	SCALE:
DATE: 08/09/10	1" = 20'
	OF 6 SHEETS

Drawing Name: G:\3600\3619 Chase - Bank Chase - Multiple Sites\3619.024 - C.B. Crystal Lake - 11.00\DWG\3619.024 Pre-01.dwg, Plotted on: Sun 09/20/10 3:07pm by: ewan@gha.com - GHA Inc.



- NOTES**
1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
  2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
  3. ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, (SOD IN R.O.W.), MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
  4. ALL ISLANDS WITH CURB & GUTTER SHALL BE LANDSCAPED.
  5. ALL DIMENSIONS AND RADII ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
  6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
  7. SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION REFER TO ALTA/ACSM LAND TITLE SURVEY.
  8. REFER TO ARCH. PLANS FOR SITE LIGHTING AND ELECTRICAL PLANS.

**46 PARKING SPACES**  
**02 ADA PARKING SPACES**  
**48 TOTAL PARKING SPACES**

**SITE: 1.602 ACRES**  
**PERVIOUS +/- 28,0556 SQ FT**  
**IMPERVIOUS +/- 41,241 SQ FT**

**STRIPING COLOR SCHEDULE**

ITEM:	COLOR:
PARKING STALL	WHITE
LETTERING "NO PARKING"	RED
LETTERING "COMPACT"	WHITE
"STOP" LEGENDS	WHITE
ACCESSIBILITY SYMBOL	BLUE W/WHITE SYMBOLS
ACCESSIBLE LOADING	BLUE
LOADING ZONE	YELLOW
DIRECTIONAL SIGNAGE	WHITE
CENTER LINE STRIPING	WHITE

**GHA GEWALT HAMILTON ASSOCIATES, INC.**  
 850 Forest Edge Drive ■ Vernon Hills, IL. 60061  
 TEL 847.478.9700 ■ FAX 847.478.9701

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**PRELIMINARY GEOMETRY PLAN**  
**CHASE BANK**  
**F.A.P. 336 (IL. RT. 31)**  
**CRYSTAL LAKE, IL**

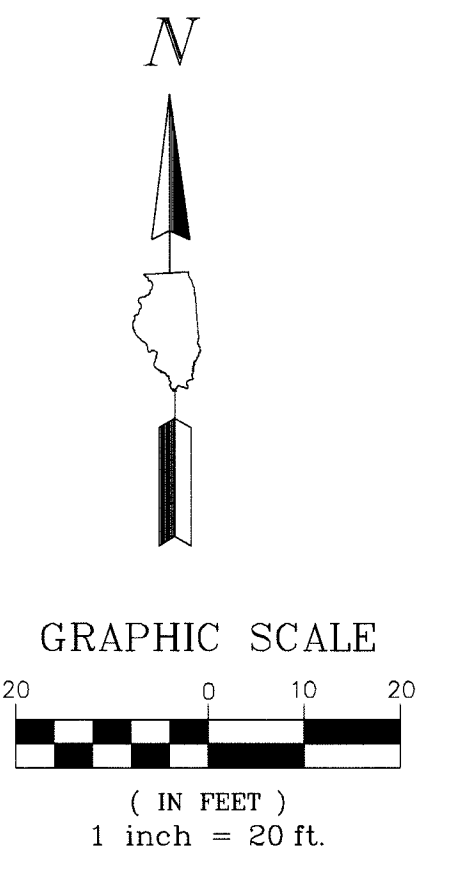
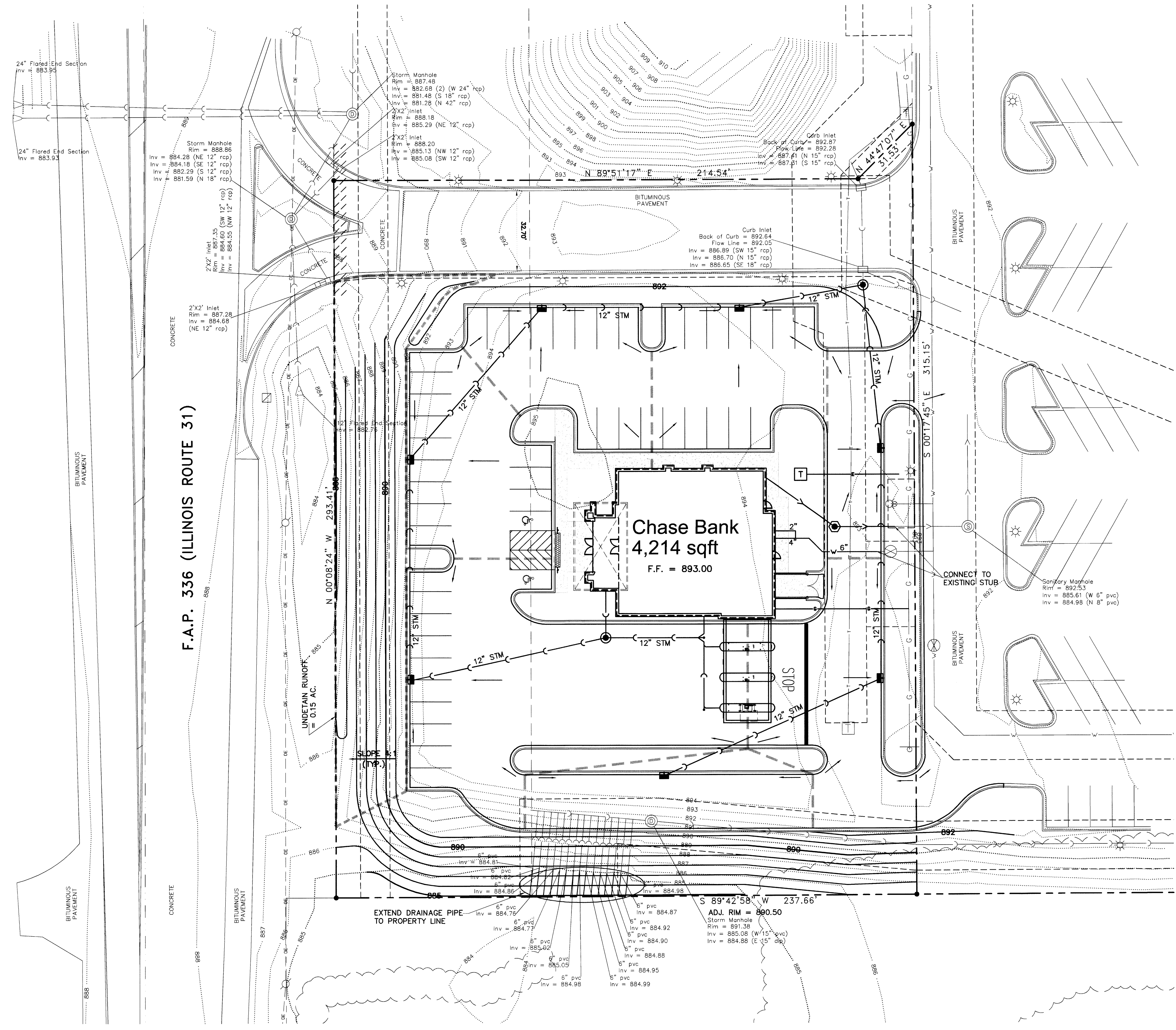
NO.	BY	DATE	REVISION

FILE: 3619.024 Pre-01.dwg	SHEET NUMBER:
DRAWN BY: AV	GHA PROJECT #
DATE: 08/09/10	3619.024
CHECKED BY: DD	SCALE:
DATE: 08/09/10	1" = 20'
	OF 6 SHEETS

**2**



Drawing Name: G:\3600\3619 Chase - Bank Drive - Multiple Sites\3619.024 - C.B. Crystal Lake - U:\CWA\DWG\3619.024 - Pre-01.dwg, Plotlet: c:\... Aug 09, 2010 - 3:08pm, by: evanderson - CHA, Inc.



**LEGEND:**

- ..... EXISTING CONTOUR (1' INT.)
- ..... EXISTING CONTOUR (5' INT.)
- PROPOSED CONTOUR (1' INT.)
- PROPOSED CONTOUR (5' INT.)
- ◀—◀—◀— EXISTING STORM SEWER
- ◀—◀—◀— EXISTING SANITARY SEWER
- G—G—G— EXISTING WATER MAIN
- T—T—T— EXISTING TELEPHONE LINE
- ◀—◀—◀— PROPOSED STORM SEWER
- ◀—◀—◀— PROPOSED SANITARY SEWER
- G—G—G— PROPOSED WATER MAIN
- T—T—T— PROPOSED TELEPHONE LINE
- PROPOSED STORM MANHOLE
- PROPOSED SANITARY MANHOLE
- PROPOSED INLET/CATCH BASIN
- CLEAN OUT
- RIDGE LINE
- FLOW DIRECTION

**GRADING/UTILITY NOTES**

1. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO ALL INLETS AND CATCH BASINS. AREAS OF SURFACE PONDING SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
2. CONTRACTOR IS DIRECTED TO ARCHITECTURAL PLANS FOR ELEVATIONS WITHIN BUILDING LIMITS OF CONSTRUCTION.
3. DRAINAGE, SEWER, AND VALVE VAULT RIMS SHALL BE FLUSH WITH ADJACENT FINISHED PAVEMENT GRADES. ALL RIM ELEVATION OF STRUCTURE SHALL BE ADJUSTED TO FINISH GRADE OF ROADWAYS, ISLANDS, CURB LINES, ETC. IF A CONFLICT EXISTS, NOTIFY ENGINEER PRIOR TO FINAL ADJUSTMENT OF STRUCTURE ELEVATION.
4. ALL WORK & MATERIALS REQUIRED FOR ADJUSTING GRADE OF EXISTING STRUCTURES SHALL BE INCIDENTAL TO SCOPE.
5. RIM ELEVATION = GUTTER ELEVATION OR PAVEMENT ELEVATION.
6. THE PROPERTY OWNERS WILL BE RESPONSIBLE FOR ALL MAINTENANCE OF THE INTERNAL STORM DRAINAGE AND DETENTION/INFILTRATION BASIN IMPROVEMENTS, INCLUDING LINES NOT WITHIN THE RIGHT OF WAY AND ALL LANDSCAPING.
7. DO NOT REMOVE INLET PROTECTION AND OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.
8. REFER TO ELECTRICAL PLAN FOR ALL SITE LIGHTING, POWER AND WIRING REQUIREMENTS.
9. CONTRACTOR SHALL INCLUDE ANY REPLACEMENT CONE, BARREL SECTIONS, ETC. AS REQUIRED TO COMPLETE ANY STRUCTURE RIM ADJUSTMENT.

**GHA GEWALT HAMILTON ASSOCIATES, INC.**  
 850 Forest Edge Drive ■ Vernon Hills, IL 60061  
 TEL 847.478.9700 ■ FAX 847.478.9701

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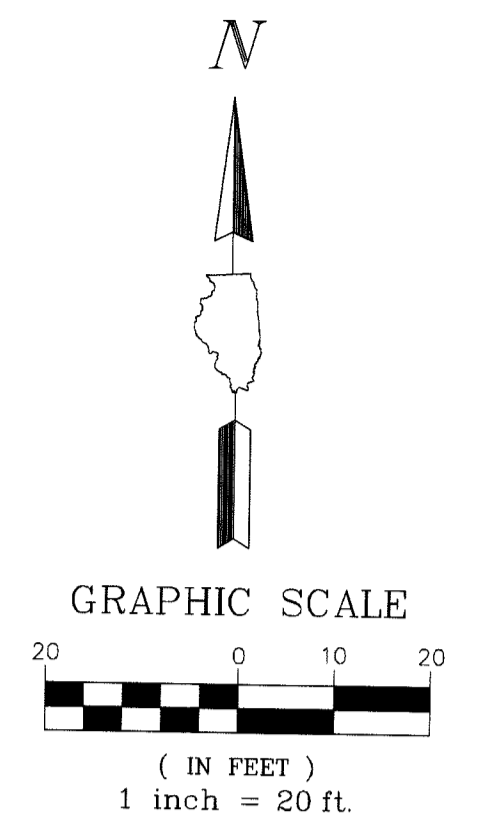
**PRELIMINARY UTILITY/GRADING PLAN**

**CHASE BANK**  
**F.A.P. 336 (IL. RT. 31)**  
**CRYSTAL LAKE, IL**

NO.	BY	DATE	REVISION

FILE: 3619.024 - Pre-01.dwg	SHEET NUMBER:
DRAWN BY: AV GHA PROJECT # 3619.024	<b>3</b>
CHECKED BY: DD SCALE: 1" = 20'	OF 6 SHEETS

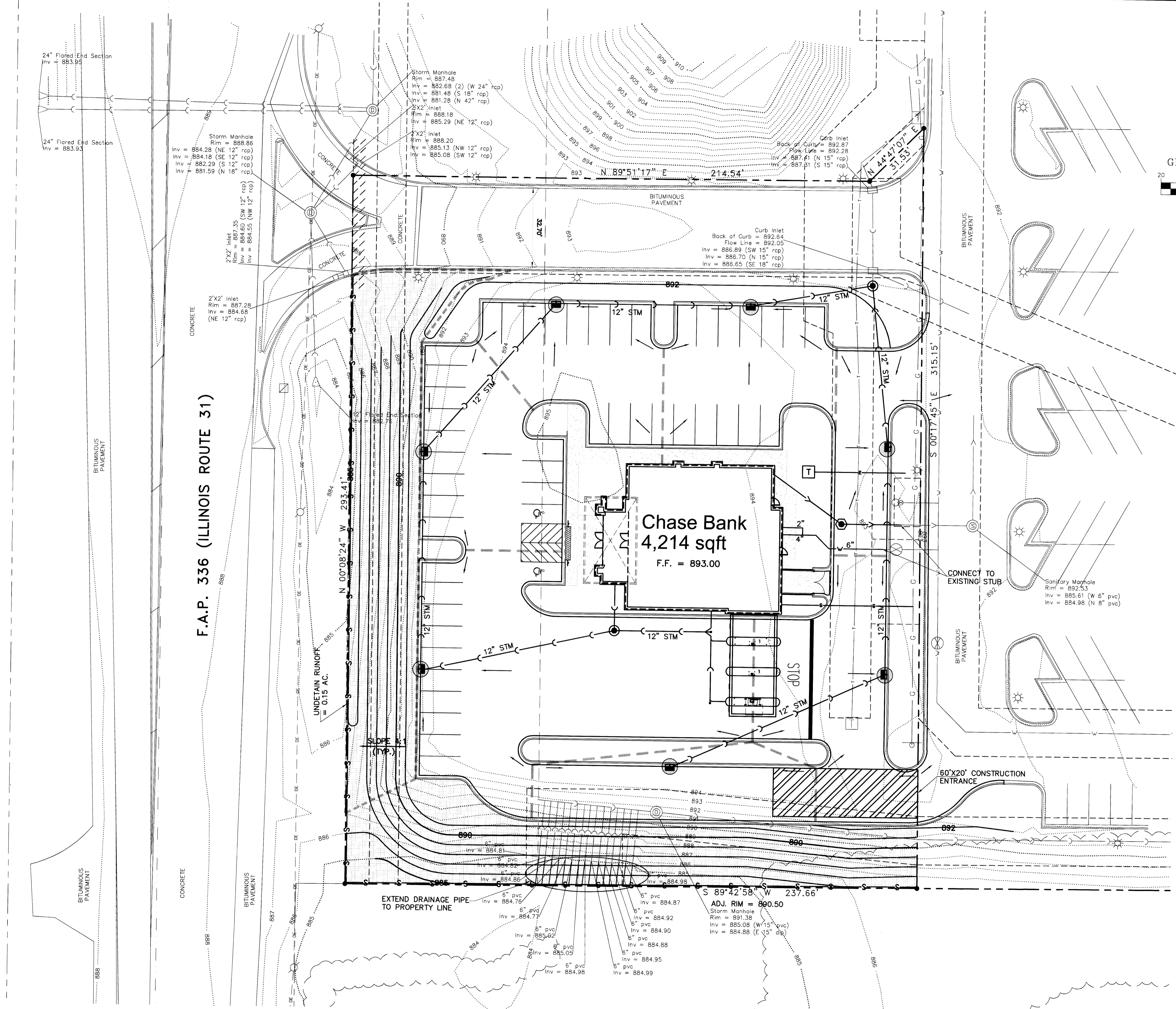




**EROSION CONTROL LEGEND**

- STORM SEWER INLET PROTECTION**
  - INLET FILTER BASKET
  - CORR ROLL INLET PROTECTION
- SILT FENCE INSTALLATION**
- EROSION CONTROL BLANKET**
  - MAG S75 (4:1 SLOPES)
  - MAG S150 (3:1 SLOPES)
  - MAG C350 (EMERGENCY OVERFLOW LOCATIONS)
- CONSTRUCTION ENTRANCE**

THE CONSTRUCTION ACTIVITIES PROPOSED HEREIN ARE SUBJECT TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT REQUIREMENTS. UPON AWARD OF THE PROJECT, THE OWNER WILL COMPLETE AND SUBMIT THE REQUIRED NOTICE OF INTENT (NOI). THE CONTRACTOR SHALL ADHERE TO THE NPDES PERMIT REQUIREMENTS AS WELL AS THE STANDARDS AND RECOMMENDATIONS IN ACCORDANCE WITH THE "STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," LATEST EDITION, PUBLISHED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL," (GREENBOOK), LATEST EDITION, PUBLISHED BY THE NORTHEASTERN ILLINOIS SOIL EROSION AND SEDIMENTATION CONTROL STEERING COMMITTEE, AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS. UPON AWARD OF THE PROJECT, THE CONTRACTOR WILL RECEIVE AND SIGN A COPY OF THE SWPPP DOCUMENTS, INCLUDING A COMPLETE COPY OF NPDES PERMIT REQUIREMENTS CONSISTING OF EROSION & SEDIMENT CONTROLS, MAINTENANCE, OBSERVATION REPORTING REQUIREMENTS, MAINTENANCE OF RECORDS, PROJECT CLOSEOUT, AND STANDARD FORMS.



F.A.P. 336 (ILLINOIS ROUTE 31)

**Chase Bank**  
4,214 sqft  
F.F. = 893.00

EXTEND DRAINAGE PIPE TO PROPERTY LINE

6" pvc Inv = 884.81  
6" pvc Inv = 884.82  
6" pvc Inv = 884.86  
6" pvc Inv = 884.76  
6" pvc Inv = 884.77  
6" pvc Inv = 885.02  
6" pvc Inv = 885.09  
6" pvc Inv = 884.98

8" pvc Inv = 884.87  
8" pvc Inv = 884.92  
8" pvc Inv = 884.90  
8" pvc Inv = 884.88  
8" pvc Inv = 884.95  
8" pvc Inv = 884.99

ADJ. RIM = 890.50  
Storm Manhole  
Rim = 891.38  
Inv = 885.08 (W 15" pvc)  
Inv = 884.88 (E 15" pvc)

Drawing Name: c:\5000\3619 Chase - Multiple Sites\3619.024 C.B. Crystal Lake, IL\DWG\DWG\3619.024 Pre-01.dwg, Plotted on: Aug 09, 2010 3:13pm by avonhanson - GHA, Inc.

**GHA GEWALT HAMILTON ASSOCIATES, INC.**  
850 Forest Edge Drive ■ Vernon Hills, IL 60061  
TEL 847.478.9700 ■ FAX 847.478.9701

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**PRELIMINARY EROSION CONTROL PLAN & NOTES**

**CHASE BANK**  
F.A.P. 336 (IL. RT. 31)  
CRYSTAL LAKE, IL

NO.	BY	DATE	REVISION

FILE: 3619.024 Pre-01.dwg	SHEET NUMBER:
DRAWN BY: AV	GHA PROJECT #
DATE: 08/09/10	3619.024
CHECKED BY: DD	SCALE:
DATE: 08/09/10	1" = 20'

4

OF 6 SHEETS



- SANITARY SEWER:**
- Non-shear stainless steel couplings shall be used when connecting sewer pipes of dissimilar materials and pipe with no hub joints. When connecting to an existing sanitary sewer by means other than an existing yoke or manhole, contractor shall use a Crown-Tite and hub-yoke or hub-saddle.
  - Unless an alternate method is approved, water stop gaskets shall be provided at all sanitary sewer manhole connections. Type and manufacturer to be approved by the City.
  - PVC plastic sewer pipe and fittings of sizes 4-inch through 15-inch shall conform to the latest revised specification requirements of ASTM D2034 for type PSM polyvinyl chloride (PVC) sewer pipe and fittings of minimum wall thickness SDR 35.
  - Joints shall be either the solvent weld type conforming to the latest revised specification requirements of ASTM D2034 and ASTM D2035, or elastomeric gasket type conforming to the latest revised specification requirements of ASTM D1189 and ASTM D3212.
  - A thicker walled pipe such as SDR 26 may be specified by the engineer depending on design and/or field conditions.
  - PVC plastic sewer pipe and fittings of sizes 18-inch through 36-inch shall conform to the latest revised specification requirements of ASTM F793 or polyvinyl chloride (PVC) large diameter ribbed gravity sewer pipe and fittings, with integral bell gasketed joints and elastomeric gaskets to form a watertight seal conforming to the latest revised specification requirements of ASTM F477 or ASTM D3212.
  - Pipe and fittings shall be the products of one approved manufacturer only, and there shall not be any mixing of pipe and fittings of different manufacturers.
  - The handling and installation of pipe, assembly or joints, and manhole connections shall be in accordance with the manufacturer's recommendations.
  - Gasket-type waterstop collars consist of a neoprene collar and a stainless steel band or other approved manhole waterstop shall be installed wherever the pipe passes through the manhole walls to provide a weathertight joint to prevent infiltration into the sewer system.
  - PVC pipe shall be installed in accordance with the latest revised specification requirements of ASTM D2221 using either compacted class II or class III granular embankment materials for bedding, hand-digging and initial backfill of 12 inches over the top of pipe to provide the necessary support for the pipe so that the maximum deflection does not exceed five percent (5%) of the pipe's original internal diameter.

- The Contractor shall provide the necessary tools and equipment and perform the work necessary to test the deflection in the initial 1200 feet of installed sewer and not less than ten percent (10%) of the remainder of the sewer project at random locations selected by the engineer no sooner than 30 days after backfilling has been completed. In the event that deflection exceeds the maximum limit of five percent (5%), the Contractor shall test at other new testable pipe for deflection. Deflection shall be tested by use of either a manhole or right hand having a diameter equal to twenty-five percent (25%) of the inside diameter of the pipe, and the test shall be performed without using mechanical pulling devices. Whenever the deflection limit is exceeded, the contractor shall uncover the pipe, carefully replace compacted embankment and backfill materials, and retest for deflection.
- The Contractor shall subject all sanitary sewers, including service lines, to an air test. Allowable infiltration shall not exceed 100 gallons per inch diameter of pipe per mile per day. Following a test, cost for testing, and testing shall be the responsibility of the Contractor.
- Cast Iron Soil Pipe service water cast iron pipe and fittings conforming to C.I.S.P. Specification 118-67 with compression type rubber gasket joints conforming to ASTM Specification C564, or other suitable materials approved by the City Engineer.

Approved: City Engineer  
 Victor C. Ramirez, P.E.  
 Director of Engineering and Building

Drawing Name: **STANDARD NOTES AND SPECIFICATIONS**

Drawing Number: **GE-02c**  
 Date: 6/12/07  
 Drawn: EM  
 Checked: LZ

CRYSTAL LAKE ILLINOIS Engineering Division

- GENERAL SITEWORK:**
- The Construction meeting shall be conducted with City Staff and all Contractors prior to commencing any grading or underground utility construction activities (schedule meeting with the Engineering Division Services Coordinator at 815-355-3616).
  - 24-hour Emergency contact numbers shall be provided to City Staff at the Pre-Construction meeting.
  - Working hours shall be limited to the hours of 7:00 a.m. and 7:00 p.m. on weekdays only (except in cases of emergency). Non-emergency work on weekends or holidays is not permitted per City Code except under a separate permit from the City Engineer, limited to a period of not more than three days and renewable only once.
  - Public/private streets shall be kept free of dirt and debris with regular cleaning, sweeping, and scraping conducted by the Contractor. Junk and debris shall not be allowed to accumulate, blow, or scatter onto streets or adjacent properties.
  - J.U.L.I.E. shall be contacted for utility locations on-site and in the adjacent rights of way.
  - Contractor shall provide and maintain fencing, barricades, traffic control signs, and other safeguarding measures during the course of all work to protect the public from the construction operation.
  - Maintain access to adjacent streets during construction. No closing of streets unless approval first obtained from the agency with jurisdiction (City Engineering Division, McHenry County Department of Transportation, Illinois Department of Transportation, etc).
  - Any damage to public right-of-way, public utilities, streets, curbs, etc. shall be repaired/replaced as soon as possible and as directed by the Engineering Division.
  - The contractor shall give the City of Crystal Lake, Illinois Department of Transportation, and any other governmental agency having jurisdiction, at least two (2) working days notice excluding Saturday and Sunday prior to the initiation of any phase of construction. Contractor shall immediately notify if construction has ceased and renew the two (2) working day notification thereafter.
  - The Contractor shall be responsible for obtaining all required permits for construction along or across existing streets or highways. The Contractor shall make arrangements for the proper bracing, shoring and other protection of all roadways before construction begins.
  - The owner is responsible for the cost of overtime inspection beyond the normal eight (8) hour day, including weekends and holidays.

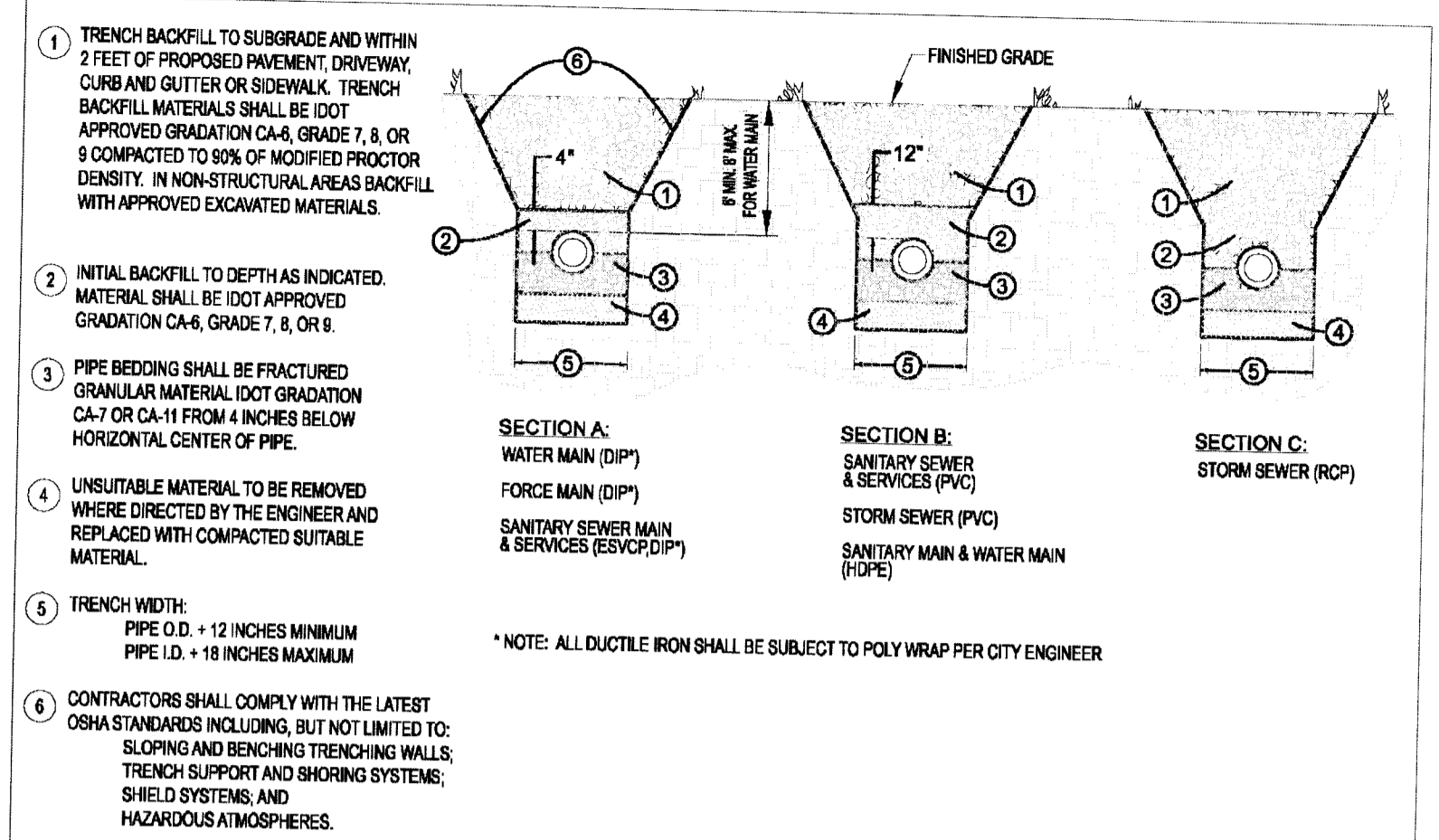
- GRAZING:**
- The grading and construction of the site improvements shall not cause ponding of storm sewer water. All areas adjacent to these improvements shall be graded to allow positive drainage.
  - The proposed grading elevations shown on the plans are finished grade. A minimum of six (6) inches of topsoil is to be placed before finished grade elevations are achieved.
  - Embankment material within roadway and open space areas shall be compacted to a minimum of ninety percent (90%) of maximum density in accordance with ASTM Specification D-1557 (modified proctor method), or to such other density as may be determined appropriate by the soils engineer.
  - All subgrade material shall have a minimum CBR (California Bearing Ratio) of 3.0 as determined by the soils engineer, or base replacement and pavement design revisions shall be provided which are adequate to obtain equivalent pavement strength.
  - Proposed pavement areas, building pads, driveways and sidewalks and yard/open space areas shall be excavated or filled to plus or minus 0.1 foot of design subgrade elevations by the Contractor.
  - Any borrow pit locations shall be identified by the Contractor on a copy of the approved site plans and forwarded to the Engineering Division at least 24 hours prior to excavation. Provide backfill compaction reports from a geotechnical engineer and soil test plans to the Engineering Division for any borrow pit areas.
  - Backfill shall be monitored by a geotechnical engineer on-site with compaction reports forwarded to the Engineering Division for review.
  - Water truck shall be on-site at all times during grading operations and be available as needed for the purpose of dust control or at the request of City Staff.
  - Use of City fire hydrants is not allowed unless approved (separate from this permit) by the Public Works Department and a hydrant meter and RPZ is obtained from the City of Crystal Lake Water Division. Only the City of Crystal Lake Water Division may operate valves and hydrants.

Approved: City Engineer  
 Victor C. Ramirez, P.E.  
 Director of Engineering and Building

Drawing Name: **STANDARD NOTES AND SPECIFICATIONS**

Drawing Number: **GE-02a**  
 Date: 6/12/07  
 Drawn: EM  
 Checked: LZ

CRYSTAL LAKE ILLINOIS Engineering Division



Approved: City Engineer  
 Victor C. Ramirez, P.E.  
 Director of Engineering and Building

Drawing Name: **TYPICAL TRENCH CROSS SECTION**

Drawing Number: **UG-03**  
 Date: 6/12/07  
 Drawn: EM  
 Checked: LZ

CRYSTAL LAKE ILLINOIS Engineering Division

- TOPSOIL STOCKPILING:**
- Location of any on-site topsoil stockpiles shall be identified on the approved plans with all fence installed around the perimeter of the stockpile.
  - Topsoil stockpiled for future use shall be relatively free from large roots, sticks, weeds, brush, stones larger than one (1) inch diameter, or other litter and waste products including other extraneous materials not conducive to plant growth.
  - Topsoil shall be stockpiled in sequence to eliminate any re-handling or double movements by the Contractor. Failure to properly sequence the stockpiling operations shall not constitute a claim for additional compensation. No material shall be stockpiled in front yards, in utility easements, or in the right-of-way lines.
  - Topsoil stockpile shall be located in areas to avoid erosion of said stockpile to off-site areas. Topsoil stockpiles are to have a minimum three (3) foot high berm around the circumference of the pile so as to control erosion and runoff.
  - If a stockpile is to remain in place for more than twelve (12) months, it is required that the stockpile be seeded so as to minimize soil erosion by both wind and water.

- EROSION CONTROL:**
- All specified erosion control measures shall be installed and maintained per the requirements of the Crystal Lake Stormwater Ordinance in accordance with the active NPDES permit.
  - All slopes 4:1 or steeper shall be sodded or bioeroded immediately after mass earthwork.
  - All overland flow routes to be stabilized by sod or blanket.
  - Erosion control measures to be inspected and approved by City Engineering Division prior to additional work on site.
  - Continuous monitoring of erosion control measures is required. Maintain records of weekly reports per the standards of the City of Crystal Lake Stormwater Ordinance.
  - The Contractor shall implement any additional erosion control measures deemed necessary by the City per the standards of the City of Crystal Lake Stormwater Ordinance.
  - All storm sewer catch basins, sumps and/or retention basins provided with this project are to be cleaned at the end of construction of the project prior to final acceptance. Cleaning may also be required during the course of the construction of the project if it is determined that the silt and debris traps are not properly functioning and their performance is impaired.
  - Re-work material shall be in accordance with Article 705 and graded in place according to Article 901 of the IDOT (Standard Specifications).

Approved: City Engineer  
 Victor C. Ramirez, P.E.  
 Director of Engineering and Building

Drawing Name: **STANDARD NOTES AND SPECIFICATIONS**

Drawing Number: **GE-02b**  
 Date: 6/12/07  
 Drawn: EM  
 Checked: LZ

CRYSTAL LAKE ILLINOIS Engineering Division

- WATER MAIN:**
- Thrust blocking shall be installed on water mains at all bends, tees, elbows, etc. except as noted below.
  - Thrust blocks not permitted with 45° vertical bends in water main (1) these shall be restrained with "Mega-Lug" or equivalent.
  - Water main shall be ductile iron pipe, Class 52 conforming to A.N.S.I. A-21.51 or AWWA C-515.
  - Gaskets and cast iron fittings shall conform to A.N.S.I. A-21.11 or AWWA C-112 and C-111 water main shall be cement lined in conformance with A.N.S.I. A-21.4 or AWWA C-104.
  - Minimum cover from finished grade to top of water main shall be six (6) feet. Maximum cover shall be eight (8) feet.
  - Water Main Tap: an Illinois licensed plumber is required for any water main tap.
  - All water mains shall be subjected to a pressure test and a separate leakage test at system pressure for 24 hours by the Contractor. Hydraulic pressure test and leakage shall be based on 125 psi for two (2) hours. Water mains shall be chlorinated in accordance with the Standard Specifications.
  - The Underground Contractor shall consider incidental to the contract any chlorination and testing of existing water main when connections to and continuation of such mains is indicated on the drawings. In the event that the pressure attributable to defective original workmanship and materials, then the Contractor shall be entitled to additional payment for correcting the deficiencies.

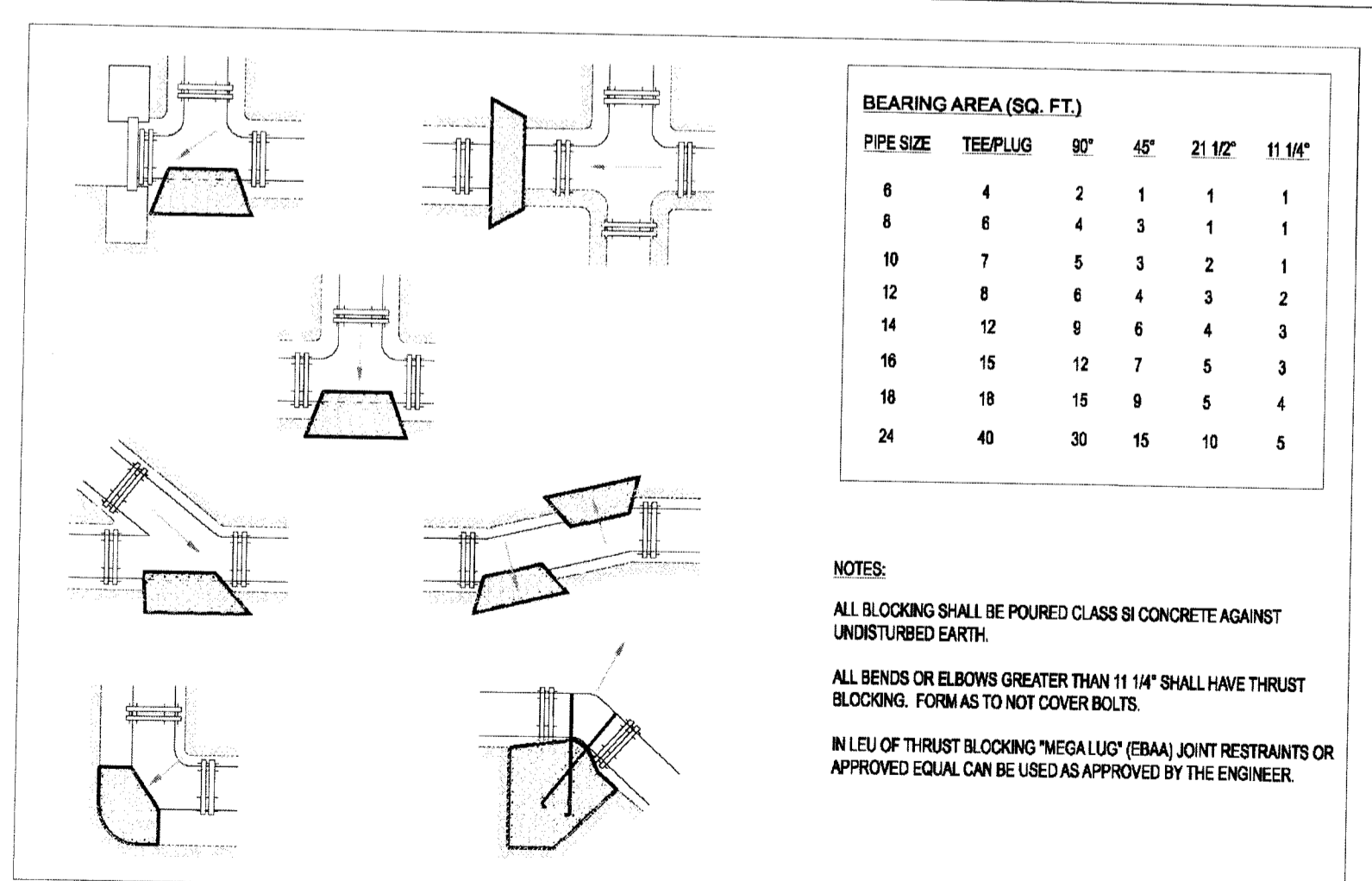
- PAVING:**
- All subgrades and bases shall be proof-rolled and approved by the Engineering Division prior to base or binder installation.
  - Subgrade and proposed pavements shall be finished by the Excavation Contractor to within 0.1 foot plus or minus, of plan elevation.
  - The Paving Contractor shall ensure that the subgrade has been properly prepared and that the finished top of subgrade elevation has been graded within the tolerances allowed in these specifications. Unless the Paving Contractor advises the owner and engineer in writing prior to fine grading for base course construction, it is understood that the Contractor has approved and accepts responsibility for the subgrade.
  - For the purpose of providing handicap accessibility and complying with the American Disability Act and City Standards, curbs shall be depressed at locations where public walks or pedestrian paths intersect curb lines at street intersections and other locations as directed.
  - ¾ inch thick precast concrete expansion joints with two (2) No. 4 plain round steel dowel bars shall be installed at designated intervals and at all P.C., P.T., curb returns and at the end of each curb. Alternate ends of the cover base shall be grouted and filled with metal expansion tubes.
  - ¾ inch thick fiber expansion joints shall be used in every case where the sidewalk coincides with the curb and gutter. Contraction joints shall be saw cut at designated intervals and at the end of each curb. The cost of these joints shall be considered as incidental to the cost of the contract.
  - All poured in place concrete curb and gutter shall incorporate two (2) No. 4 reinforcing bars installed wherever the curb and gutter crosses utility service lines, the cost of which shall be considered incidental to the cost of concrete curb and gutter.
  - Sidewalks (where required) shall be of the thickness and dimensions as shown in the construction plans. All sidewalk concrete shall be a minimum of 6" bag mix (or DOT class 5) concrete and shall develop a minimum of 0.500 compressive strength at twenty eight (28) days. Contraction joints shall be set at four (4) foot centers, and one-half inch (½") precast concrete expansion joints at forty (40) foot centers and where the sidewalk meets the curb or another sidewalk, or at the end of each curb. All sidewalks constructed over utility trenches and/or abutting driveway aprons shall be reinforced with three (3) No. 4 reinforcing bars (10 foot minimum length).

Approved: City Engineer  
 Victor C. Ramirez, P.E.  
 Director of Engineering and Building

Drawing Name: **STANDARD NOTES AND SPECIFICATIONS**

Drawing Number: **GE-02d**  
 Date: 6/12/07  
 Drawn: EM  
 Checked: LZ

CRYSTAL LAKE ILLINOIS Engineering Division

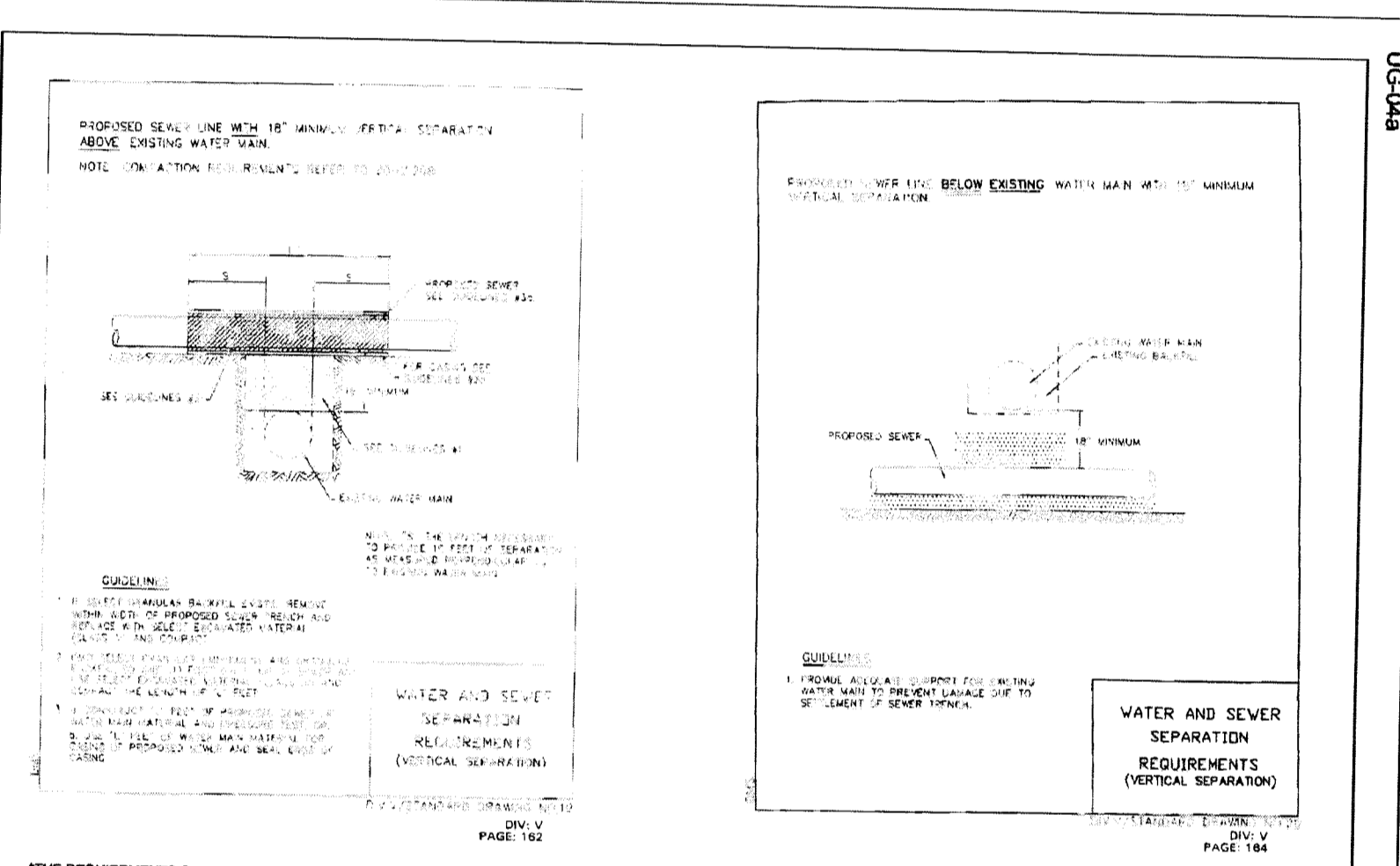


Approved: City Engineer  
 Victor C. Ramirez, P.E.  
 Director of Engineering and Building

Drawing Name: **THRUST BLOCK INSTALLATION**

Drawing Number: **UW-03**  
 Date: 4/15/2007  
 Drawn: EM  
 Checked: JN

CRYSTAL LAKE ILLINOIS Engineering Division

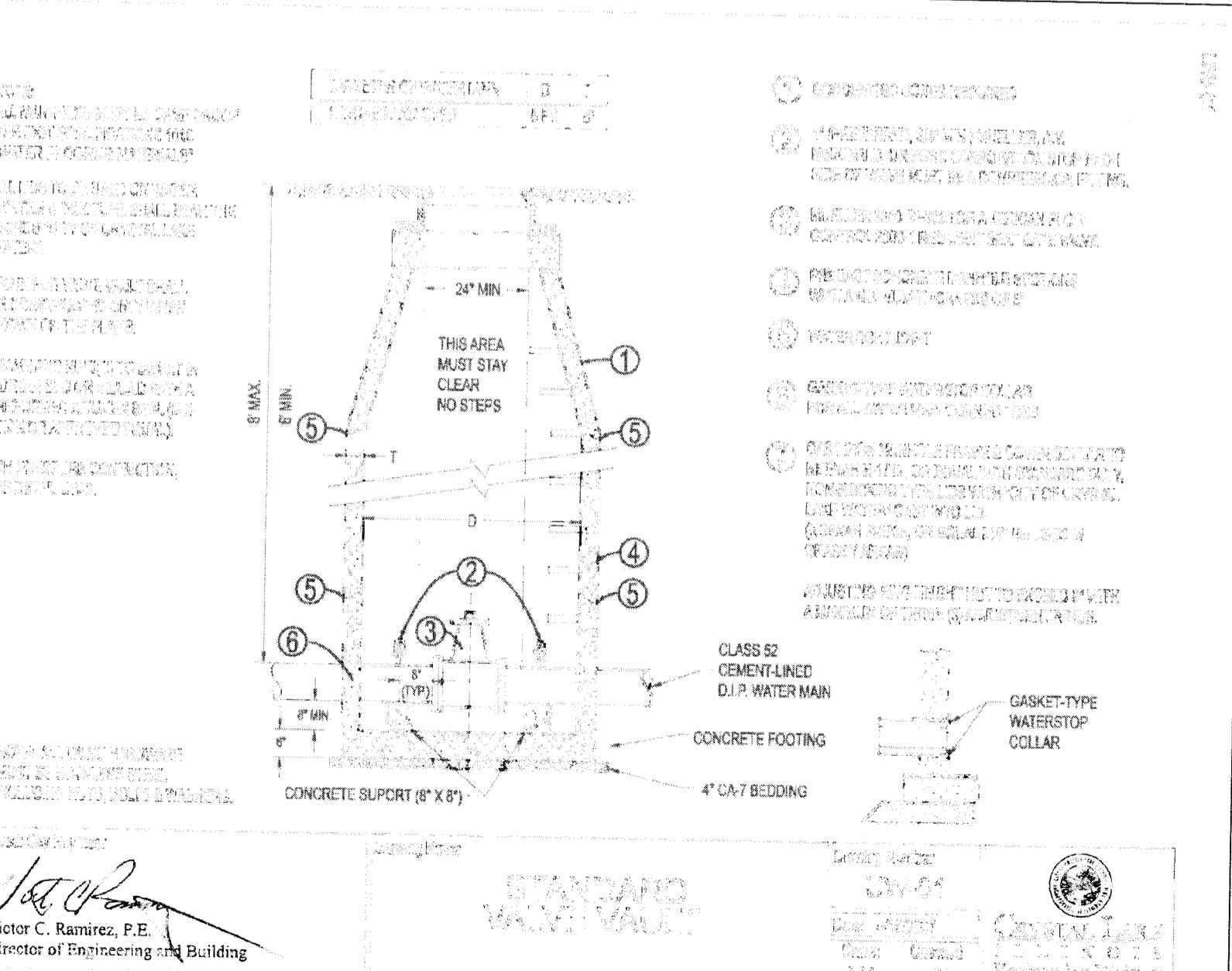


Approved: City Engineer  
 Victor C. Ramirez, P.E.  
 Director of Engineering and Building

Drawing Name: **WATER AND SEWER SEPARATION REQUIREMENTS**

Drawing Number: **UG-04a**  
 Date: 4/15/2007  
 Drawn: EM  
 Checked: LZ

CRYSTAL LAKE ILLINOIS Engineering Division



Approved: City Engineer  
 Victor C. Ramirez, P.E.  
 Director of Engineering and Building

Drawing Name: **CONCRETE FOOTING AND CURB AND GUTTER**

Drawing Number: **UG-04b**  
 Date: 4/15/2007  
 Drawn: EM  
 Checked: JN

CRYSTAL LAKE ILLINOIS Engineering Division

NO.	BY	DATE	REVISION



**CONSTRUCTION ENTRANCE**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: CONSTRUCTION ENTRANCE

Drawing Number: EC-02

Date: 4/15/2007

Drawn: EM

Checked: LZ

Crystal Lake ILLINOIS Engineering Division

**CATCH BASIN, TYPE A**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: CATCH BASIN, TYPE A

Drawing Number: UD-01b

Date: 4/15/2007

Drawn: EM

Checked: LZ

Crystal Lake ILLINOIS Engineering Division

**PUBLIC SIDEWALK RAMP DETAIL (MODIFIED IDOT 424001-04)**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: PUBLIC SIDEWALK RAMP DETAIL (MODIFIED IDOT 424001-04)

Drawing Number: RD-03a

Date: 4/15/2007

Drawn: EM

Checked: MS

Crystal Lake ILLINOIS Engineering Division

**CURB: CONCRETE CURB TYPE B**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: CURB: CONCRETE CURB TYPE B

Drawing Number: RD-05b

Date: 4/15/2007

Drawn: EM

Checked: MS

Crystal Lake ILLINOIS Engineering Division

**SILT FENCE**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: SILT FENCE

Drawing Number: EC-01

Date: 4/15/2007

Drawn: EM

Checked: LZ

Crystal Lake ILLINOIS Engineering Division

**STORM MANHOLE TYPE A**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: STORM MANHOLE TYPE A

Drawing Number: UD-01d

Date: 4/15/2007

Drawn: EM

Checked: LZ

Crystal Lake ILLINOIS Engineering Division

**SIDEWALK RAMPS: DETECTABLE WARNINGS (MODIFIED IDOT 424001-04)**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: SIDEWALK RAMPS: DETECTABLE WARNINGS (MODIFIED IDOT 424001-04)

Drawing Number: RD-03b

Date: 4/15/2007

Drawn: EM

Checked: MS

Crystal Lake ILLINOIS Engineering Division

**STANDARD SANITARY AND MONITORING MANHOLE**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: STANDARD SANITARY AND MONITORING MANHOLE

Drawing Number: US-04

Date: 11/2/2007

Drawn: EM

Checked: TH

Crystal Lake ILLINOIS Engineering Division

**INLET SEDIMENT CONTROL DEVICE**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: INLET SEDIMENT CONTROL DEVICE

Drawing Number: EC-04

Date: 11/2/2007

Drawn: EM

Checked: LZ

Crystal Lake ILLINOIS Engineering Division

**CURB INLET FRAME AND GRATE**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: CURB INLET FRAME AND GRATE

Drawing Number: UD-02a

Date: 11/2/2007

Drawn: EM

Checked: TH

Crystal Lake ILLINOIS Engineering Division

**CURB: CONCRETE CURB AND GUTTER**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: CURB: CONCRETE CURB AND GUTTER

Drawing Number: RD-05a

Date: 6/1/2007

Drawn: EM

Checked: MS

Crystal Lake ILLINOIS Engineering Division

**TYPICAL HANDICAP ACCESSIBLE PARKING STALL**

Approved: City Engineer Victor C. Ramirez, P.E. Director of Engineering and Building

Drawing Name: TYPICAL HANDICAP ACCESSIBLE PARKING STALL

Drawing Number: TR-06

Date: 6/1/2007

Drawn: EM

Checked: RP

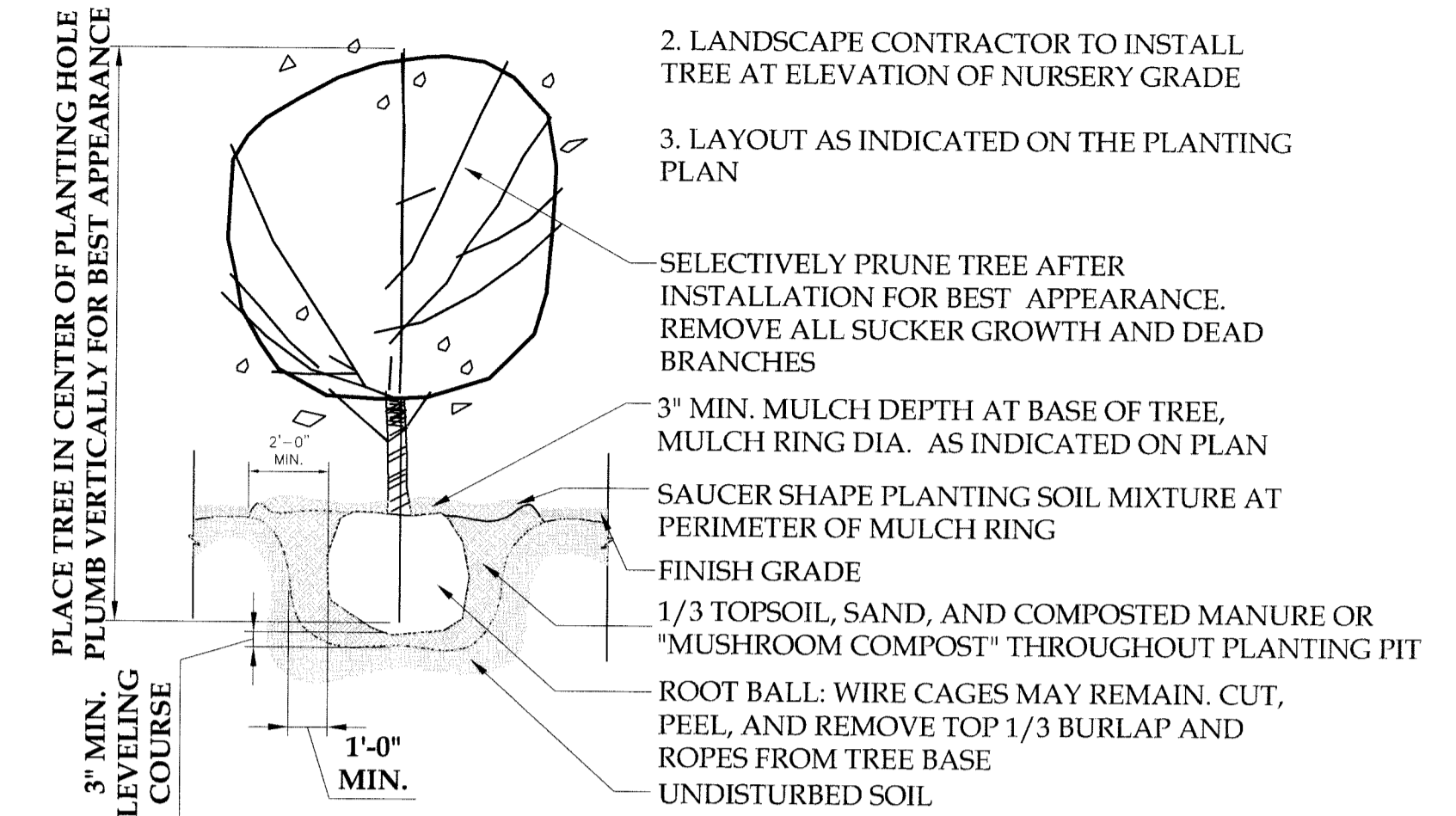
Crystal Lake ILLINOIS Engineering Division



**LANDSCAPE GENERAL NOTES:**

1. ALL PLANT MATERIAL IS SUBJECT TO AVAILABILITY AND CORRECT SEASONAL PLANTING PROCEDURE. ANY AND ALL SUBSTITUTIONS REQUEST MUST BE SUBMITTED IN WRITING TO THE OWNER'S REPRESENTATIVE PRIOR TO ORDERING SUBSTITUTION MATERIALS.
2. ALL PLANTS SHALL RECEIVE MIN. 4" DEPTH OF SHREDDED HARDWOOD BARK MULCH COVER IN PLANTING BED, INCLUDING PERENNIAL PLANTINGS.
3. THE LANDSCAPE CONTRACTOR SHALL STAKE AND LAYOUT ALL INSTALLATIONS AND BEDS FOR APPROVAL BY OWNER'S REPRESENTATIVE. FAILURE TO RECEIVE REVIEW AND APPROVAL MAY BE CAUSE TO REQUIRE THE REMOVAL OF PLANTS AND REINSTALLATION AT NO ADDITIONAL COST TO THE OWNER.
4. THE CONTRACTOR SHALL SUPPLY LANDSCAPE PLANTING SOIL MIX FOR ALL PERENNIAL PLANTING BEDS TO CONSIST OF 1/3 TOPSOIL, 1/3 SAND AND 1/3 COMPOSTED MANURE OR "MUSHROOM COMPOST". THIS MIXTURE IS TO BE ROTOTILLED INTO THE SOIL A MINIMUM OF 8" THROUGHOUT THE BED, AFTER INSTALLATION MULCH AS SPECIFIED ABOVE. CONTRACTOR MUST ALSO WORK INTO SOIL TERRA-SORB HB AT A RATE PER THE MANUFACTURER'S RECOMMENDATION ALL SHRUB AND NON-IRRIGATED TREE AND PERENNIAL BEDS. SUBMIT MANUFACTURER'S LITERATURE FOR APPROVAL PRIOR TO IMPLEMENTATION.

- NOTES:
1. LANDSCAPE CONTRACTOR SHALL CONFIRM TREE PIT DOES NOT HOLD WATER.
  2. LANDSCAPE CONTRACTOR TO INSTALL TREE AT ELEVATION OF NURSERY GRADE
  3. LAYOUT AS INDICATED ON THE PLANTING PLAN



**2 Tree Planting Detail**  
SCALE: NTS

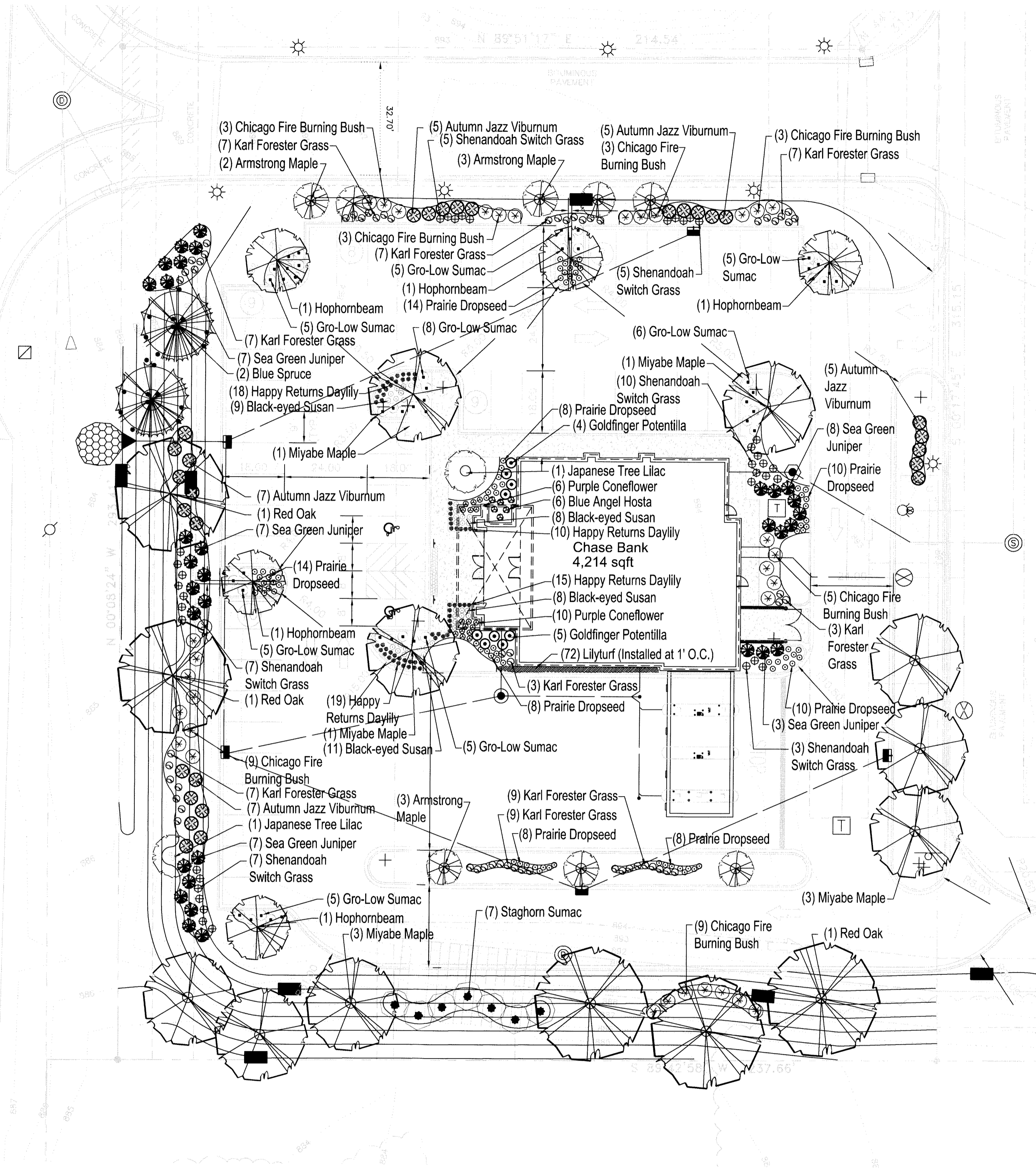
- PLACE SHRUB IN CENTER OF PLANTING HOLE PLUMB VETICALLY FOR BEST APPEARANCE
- SELECTIVELY PRUNE ALL SHRUBS AFTER INSTALLATION FOR BEST APPEARANCE. REMOVE ALL UNDESIREABLE GROWTH AND DEAD BRANCHES
- 3" MIN. MULCH DEPTH WITHIN PLANTING BED, MULCH BED LAYOUT/SIZING AS INDICATED ON PLAN
- SAUCER SHAPE PLANTING SOIL MIXTURE AT PERIMETER OF PLANTING BED
- FINISH GRADE
- 1/3 TOPSOIL, SAND, AND COMPOSTED MANURE OR "MUSHROOM COMPOST" TO 8" MINIMUM DEPTH WITH TERRASORB APPLIED AS SPECIFIED
- ROOT BALL: CUT, PEEL, AND REMOVE TOP 1/3 BURLAP
- UNDISTURBED SOIL
- LANDSCAPE CONTRACTOR TO INSTALL SHRUB(S) TO REFLECT NURSERY GRADE(S)
- LAYOUT AS INDICATED ON THE PLANTING PLAN

**3 Shrub Planting Detail**  
SCALE: NTS

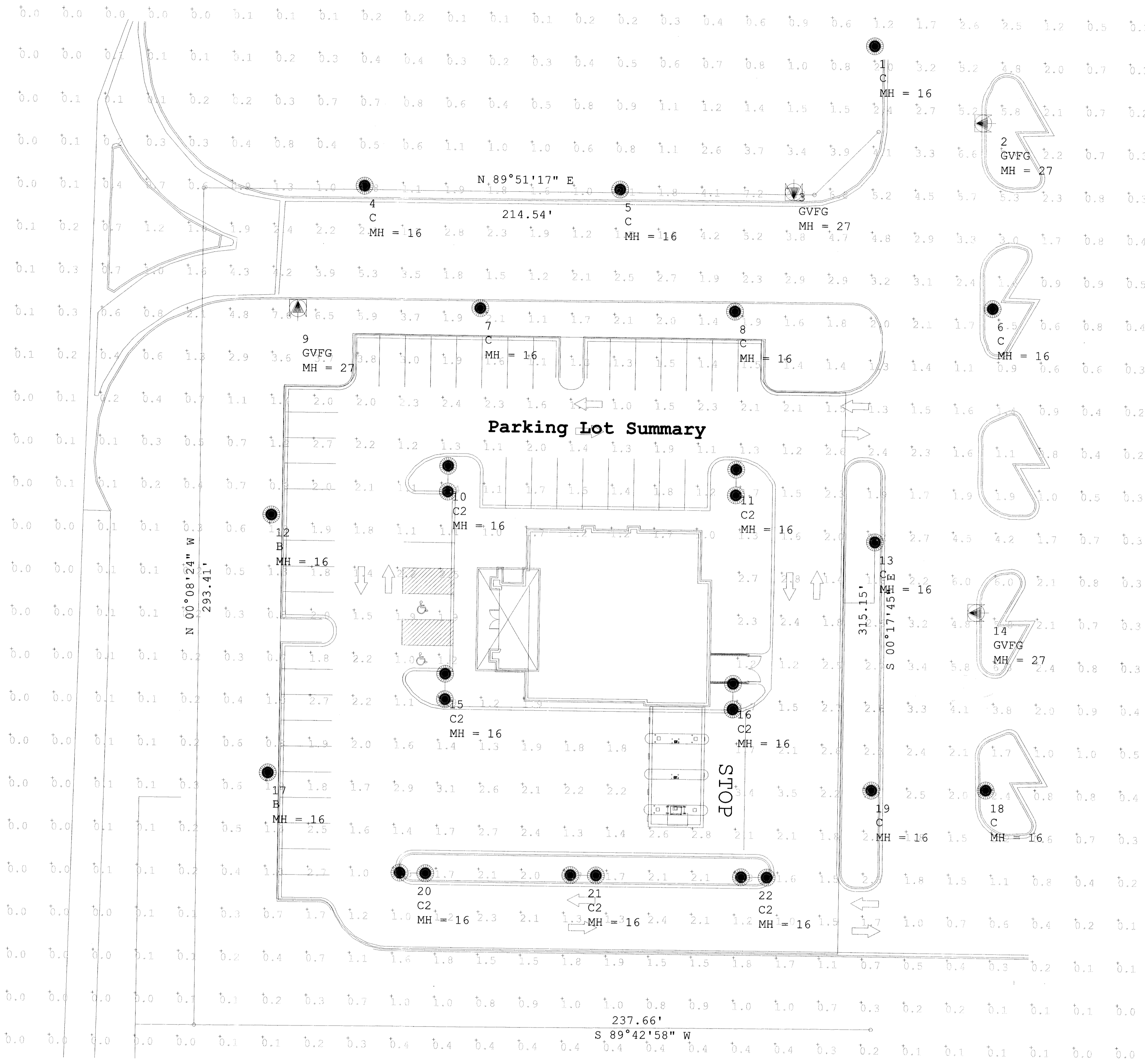
- SELECTIVELY PRUNE PERENNIALS AFTER INSTALLATION FOR BEST APPEARANCE. REMOVE ALL UNDESIREABLE GROWTH AND DEAD MATERIAL
- 3" MIN. MULCH DEPTH WITHIN PLANTING BED, MULCH BED LAYOUT/SIZING AS INDICATED ON PLAN
- SAUCER SHAPE PLANTING SOIL MIXTURE AT PERIMETER OF PLANTING BED
- FINISH GRADE
- 1/3 TOPSOIL, SAND, AND COMPOSTED MANURE OR "MUSHROOM COMPOST" TO 8" MINIMUM DEPTH WITH TERRASORB MIXED IN BEDS
- UNDISTURBED SOIL
- LAYOUT AS INDICATED ON THE PLANTING PLAN

**4 Perennial Planting Detail**  
SCALE: NTS

COMMON NAME	BOTANICAL NAME	QUANT	SIZE
<b>SHADE TREES</b>			
Miyabe Maple	<i>Acer miyabei</i>	9	5" BB
Red Oak	<i>Quercus rubra</i>	5	5" BB
"Armstrong" Maple	<i>Acer freemanii "Armstrong"</i>	8	5" BB
Hophornbeam	<i>Ostrya virginiana</i>	5	5" BB
<b>ORNAMENTAL TREES</b>			
Japanese Tree Lilac	<i>Syringa reticulata</i>	2	8' BB
<b>EVERGREEN TREES</b>			
Blue Spruce	<i>Picea pungens 'Glauca'</i>	2	12' BB
<b>SHRUBS</b>			
"Autumn Jazz" Viburnum	<i>Viburnum dentatum "Autumn Jazz"</i>	29	36" BB
Chicago Fire Burning Bush	<i>Euonymus alatus "Timber Creek"</i>	33	36" BB
Goldfinger Potentilla	<i>Potentilla fruticosa</i>	9	18" BB
"Gro-Low" Sumac	<i>Rhus aromatica "Gro-Low"</i>	49	#5 Cont.
Sea Green Juniper	<i>Juniperus chinensis 'Sea Green'</i>	32	36" BB
Staghorn Sumac	<i>Rhus typhina</i>	7	#5 Cont.
<b>PERENNIALS</b>			
Black-eyed Susan	<i>Rudbeckia fulgida 'Goldstrum'</i>	36	#1 Cont.
Blue Angel Hosta	<i>Hosta 'Blue Angel'</i>	6	#1 Cont.
Lilyturf	<i>Liriope spicata</i>	72	1 QT.
Happy Returns Daylily	<i>Hemerocallis 'Happy Returns'</i>	62	#1 Cont.
Karl Foerster Grass	<i>Calamagrostis scutiflora "Karl Foerster"</i>	59	#3 Cont.
Prairie Dropseed Grass	<i>Sporobolus heterolepis</i>	80	#1 Cont.
Purple Cone Flower	<i>Echinacea purpurea 'Magnus'</i>	16	#1 Cont.
"Shenandoah" Red Switch Grass	<i>Panicum virgatum "Shenandoah"</i>	37	#1 Cont.



**1 Landscape Plan**  
SCALE: 1" = 20'



Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
●	2	B	SINGLE	14000	0.800	MNC-150-MP-X-3-C-V-X
◐	4	GVFG	SINGLE	40000	0.800	MPTR-3S-400
●	9	C	SINGLE	14000	0.800	MNC-150-MP-X-5-C-V-X
●	7	C2	BACK-BACK	14000	0.800	MNC-150-MP-X-5-C-V-X

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
CalcPts@Grade	Illuminance	Fc	0.71	7.6	0.0	N.A.
Parking Lot Summary	Illuminance	Fc	1.84	3.8	1.0	1.84

Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	Tilt
1	C	375	420.5	16	0	0
2	GVFG	418	394	27	180	0
3	GVFG	347.25	373.5	27	270	0
4	C	196.5	369	16	270	0
5	C	286.25	369	16	270	0
6	C	417.75	329	16	180	0
7	C	237.75	326.75	16	90	0
8	C	327.25	326.75	16	90	0
9	GVFG	173.75	321.25	27	90	0
10	C2	227.25	266.75	16	90	0
11	C2	328.5	266.75	16	90	0
12	B	165.5	253.25	16	0	0
13	C	377.5	246.5	16	0	0
14	GVFG	418	222.25	27	180	0
15	C2	227.25	194	16	90	0
16	C2	328.5	191.75	16	90	0
17	B	165.5	163	16	0	0
18	C	417.75	160	16	180	0
19	C	377.5	159.5	16	0	0
20	C2	216.75	128.5	16	0	0
21	C2	276.75	128.5	16	0	0
22	C2	336.75	128.5	16	0	0

Parking Lot Design Guide	Basic (for typical conditions)	Basic Enhanced Security (in consideration of personal security or vandalism)	Security (Security Lighting for Public Spaces)	High Security (Security Lighting for Public Spaces)
	lux/ft	lux/ft	lux/ft	lux/ft
Minimum Horizontal Illuminance (Measured on parking surface without shadowing from any object)	2.0/0.2	5.0/0.5	10.0/1.0	30.0-60.0/3.0 - 6.0
Uniformity Ratio: Maximum - to - Minimum	20 : 1	15 : 1	15 : 1	*4:1 *Avg - Min
Minimum Vertical Illuminance (On Parallel perpendicular measured at 5' above the parking surface at the point of lowest horizontal illuminance)	1.0/0.1	2.5/0.25	5.0-8.0/0.5-0.8	12 - 60/1.2-6.0

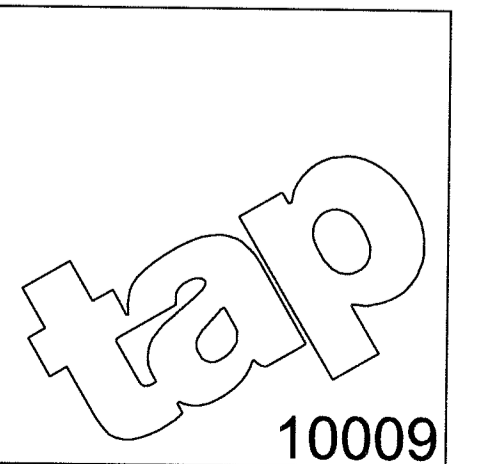
1 PHOTOMETRIC PLAN  
SCALE: 1"=30'-0"



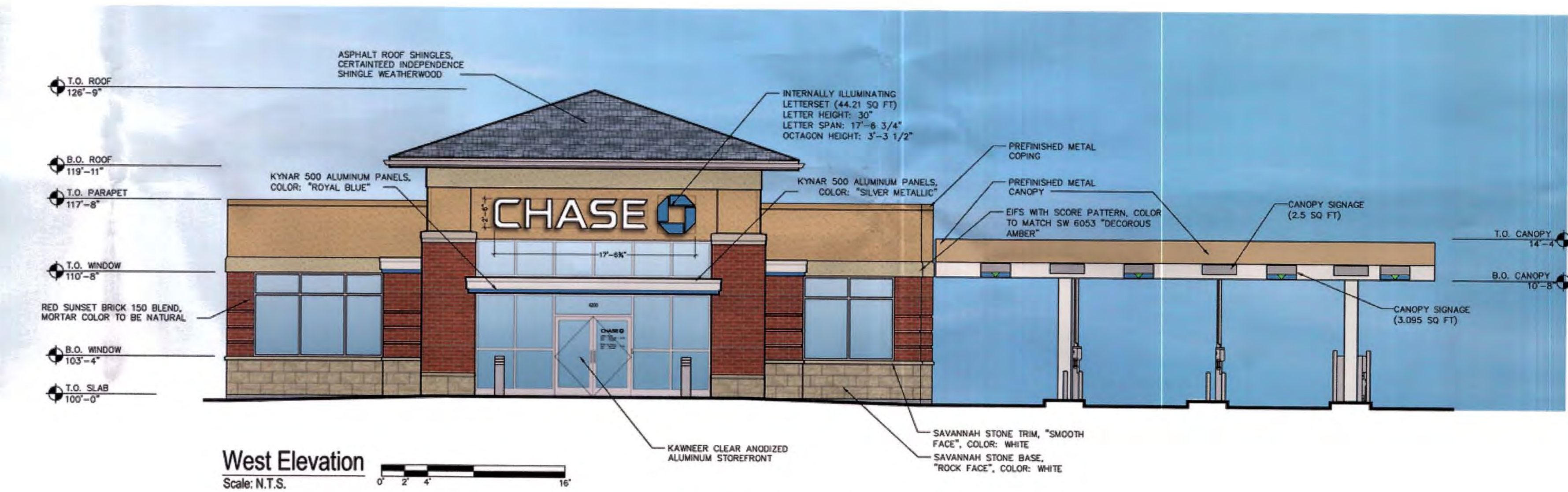
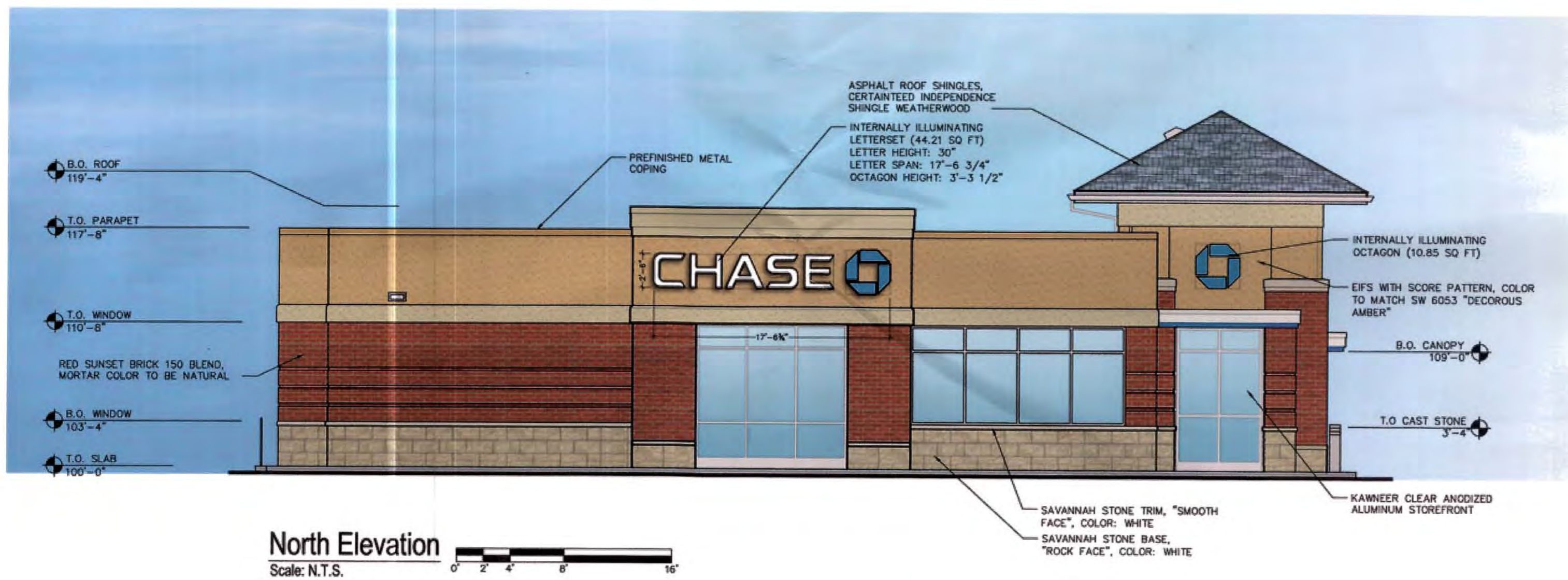
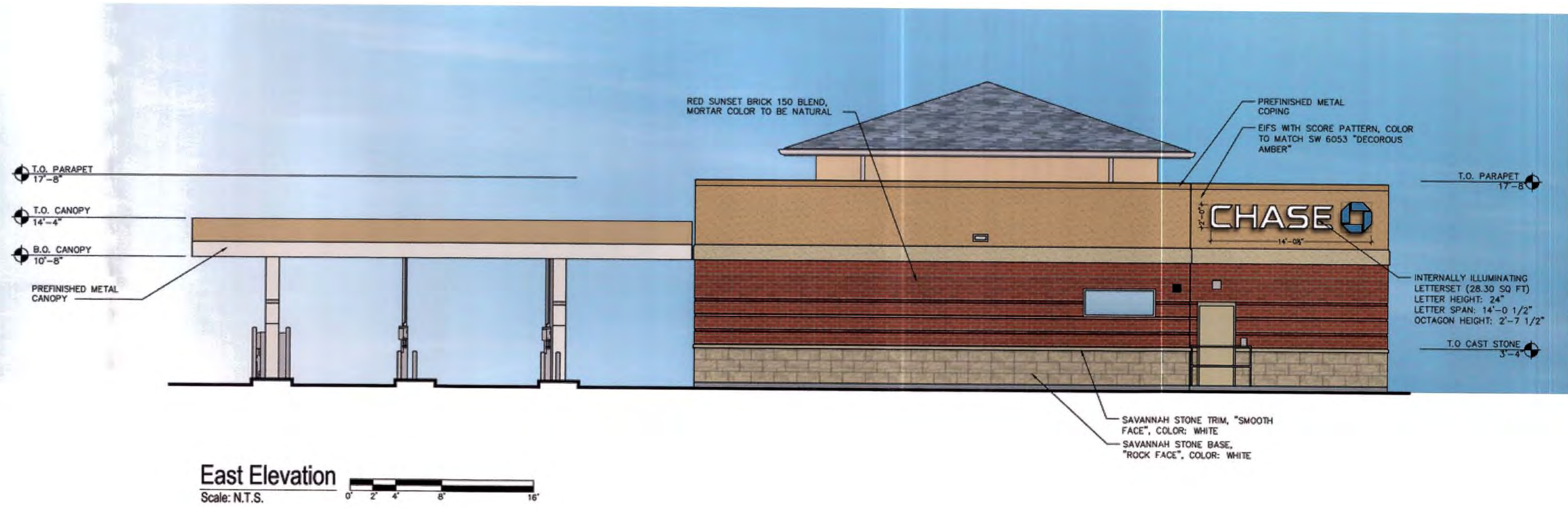
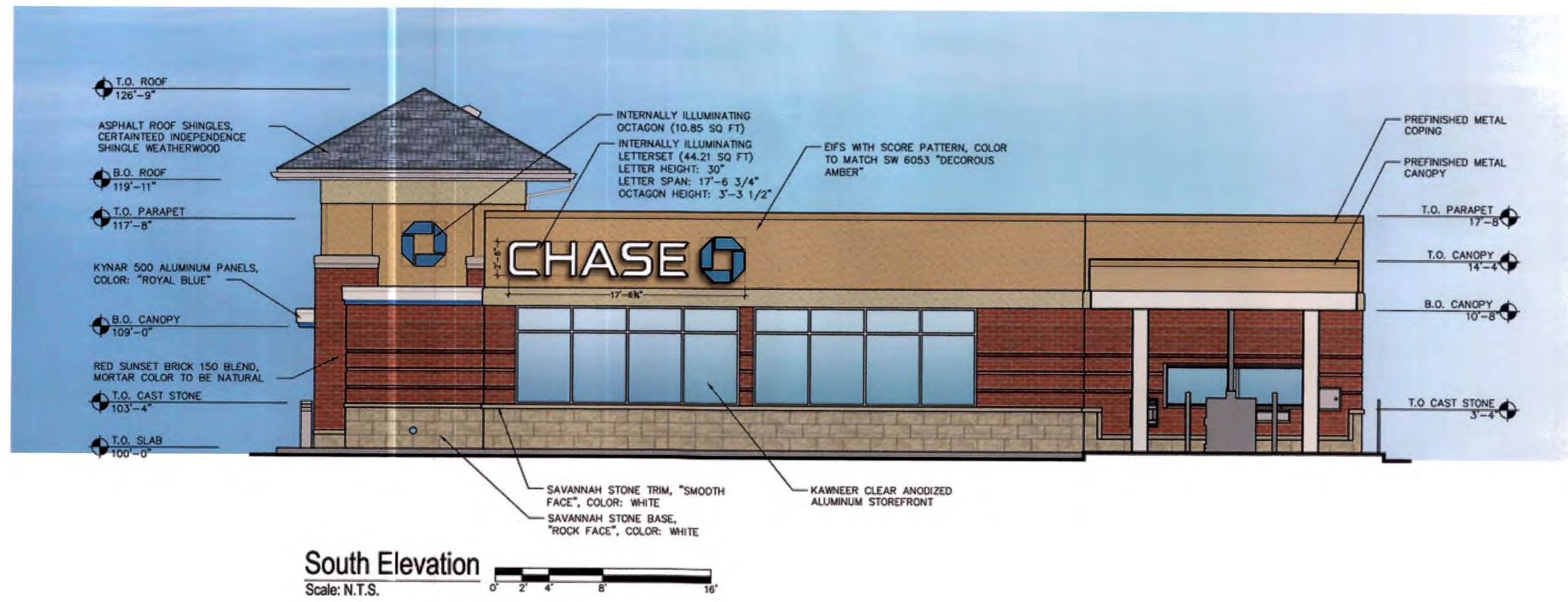
**CHASE**  
**CRYSTAL LAKE**  
 1205 S. IL ROUTE 31  
 CRYSTAL LAKE, ILLINOIS

**PROPOSED PHOTOMETRIC PLAN**  
 June 29th, 2010

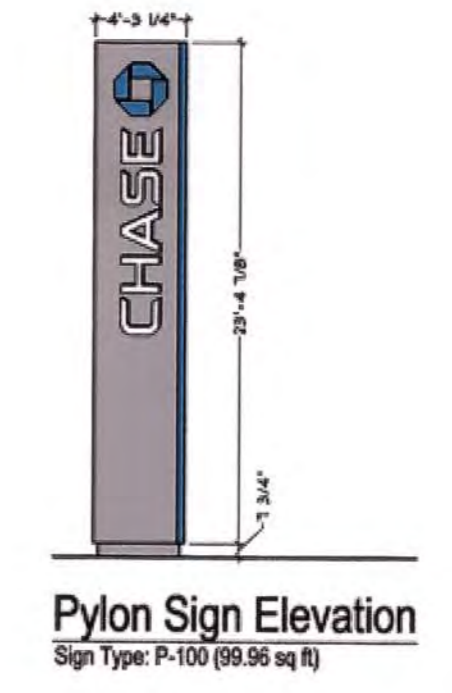
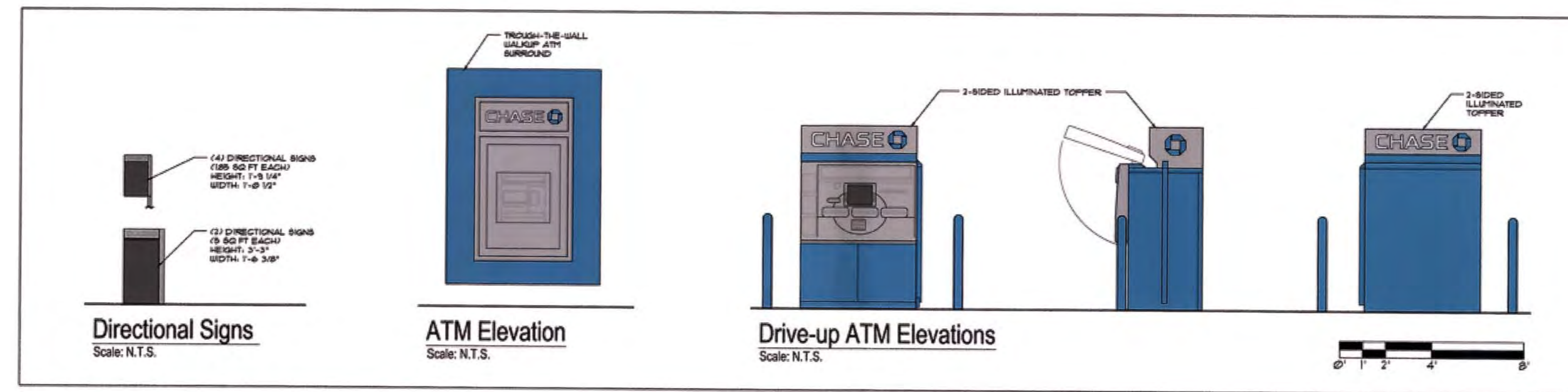
Architect/Designer  
 The Architects Partnership  
 122 South Michigan Avenue  
 Chicago, IL 60603  
 t: 312.583.9800  
 f: 312.583.9890







SIGNAGE SQ. FT.
NORTH ELEVATION: 55.06 SQ FT
SOUTH ELEVATION: 55.06 SQ FT
EAST ELEVATION: 28.30 SQ FT
WEST ELEVATION: 64.09 SQ FT
<b>TOTAL SIGNAGE SQ. FT.: 202.51</b>



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