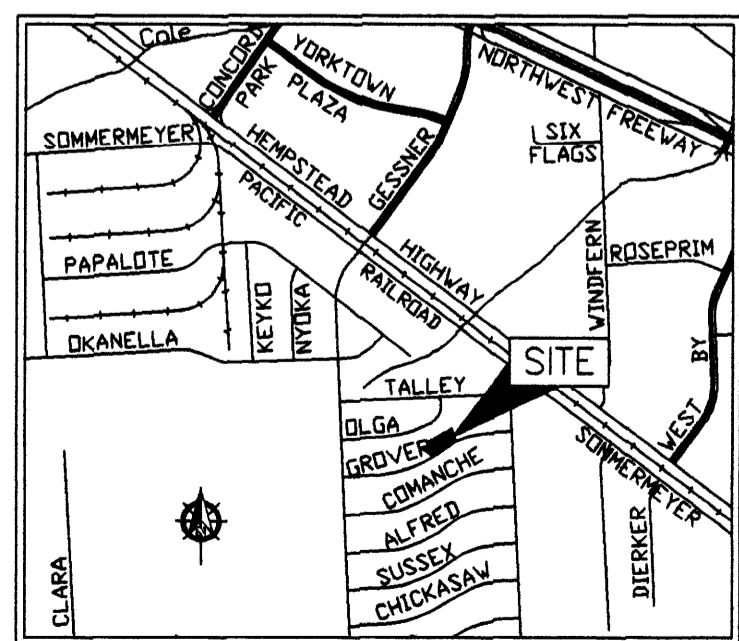
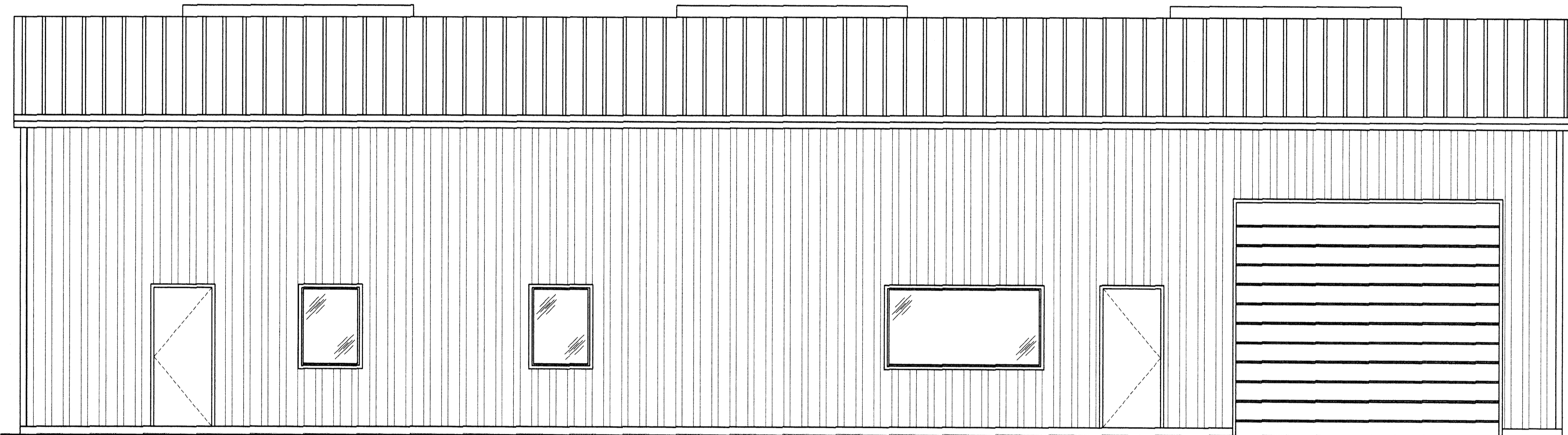
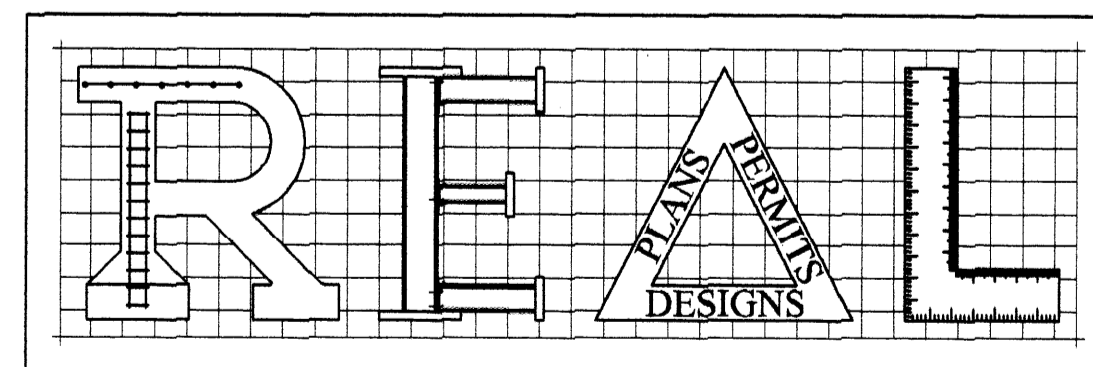


PROPOSED OFFICE WAREHOUSE
 LOCATED AT
 10038 GROVER LANE
 HOUSTON, TEXAS 77041



VICINITY MAP
 NOT TO SCALE
 KEY MAP #410-19; ZIP CODE 77041

VED
 PLAN
 C. 10224 OF
 '06.
 ON JOB FOR
 PERMIT FOR
 NO. 372



P.O. Box 23398
 Houston, Texas 77228

Office: 832-654-7862
 Mobile: 832-407-4879
 E-mail: real_designs@live.com

DECEMBER 2014

CODE ANALYSIS

Scope of work: A proposed metal building used for office space and warehouse space. It is equipped with three restrooms and consists of 9,600 sq. ft.

Located at:
 10038 Grover Lane
 Houston, Texas 77041

APPLICABLE CODES (including, but not limited to)
 2006 International Building Code (IBC) w/City of Houston Amendments
 2006 Uniform Mechanical Code (UMC)
 2006 Uniform Plumbing Code (UPC)
 2014 National Electrical Code (NEC)
 2006 International Fire Code (IFC)
 2009 International Energy Conservation Code (IECC)

Texas Accessibility Code for Building Construction, Latest Edition
 City of Houston Ordinances

1. OCCUPANCY TYPE (IBC 311.3, p.37)

Group B (Business)
 Group S-1 (Warehouse/Storage)

OCCUPANT LOAD (IBC Table 1004.1.2 p. 195)

23 Occupants (Refer to Occupancy Summary)

2. PHYSICAL PROPERTIES OF BUILDING

Proposed metal building on concrete slab.
 1 story- 9,600 gross square feet total.

3. MINIMUM PLUMBING FACILITIES

Restroom: 3 water closets & 3 lavatories
 5 Gallon water bottle dispenser

4. CONSTRUCTION TYPE

Type II-B
 Max building area 12,500 s.f. (Table 503, p. 76)
 Max stories 4 (Table 503, p. 76)
 Exterior bearing wall construction 0 Hr (Table 601, p. 88)
 Interior bearing wall construction 0 Hr (Table 601, p. 88)
 Exterior non-bearing wall construction 0 Hr (Table 601, p. 88)
 Structural frame construction 0 Hr (Table 601, p. 88)
 Permanent partitions construction 0 Hr (Table 601, p. 88)
 Shaft enclosure construction 0 Hr (Table 601, p. 88)
 Floor and floor-ceiling construction 0 Hr (Table 601, p. 88)
 Roofs and roof-ceiling construction 0 Hr (Table 601, p. 88)
 Fire-resistance for exterior walls greater than or equal to 30'-0" apart 0 Hr (Table 602, p. 87)

5. SPRINKLER SYSTEM

Fire Sprinkler NOT REQUIRED.

REVISIONS	No.	DATE	DESCRIPTION
	1		
	2		

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 real_designs@live.com
 www.real-designs-inc.com

OWNER:

TRUCK
 SALES

PROPOSED
 METAL BUILDING
 FOR OFFICE WAREHOUSE
 LOCATED AT
 10038 GROVER LANE
 HOUSTON, TEXAS 77041

DRAWING TITLE:

COVER
 SHEET

DATE:

12-03-14

DESIGN:

8613

DRAWN:

8613

SCALE:

NO SCALE

JOB No:

14093033

FILE:

REAL\2014\14093033\10038 GROVER LANE\MARCH

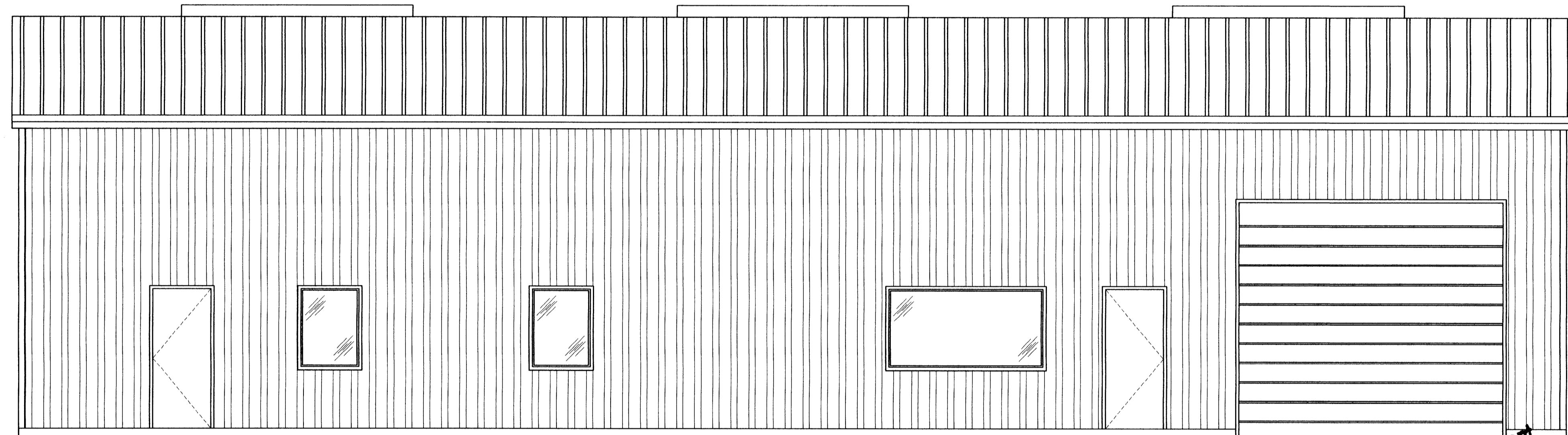
DRAWING

CS

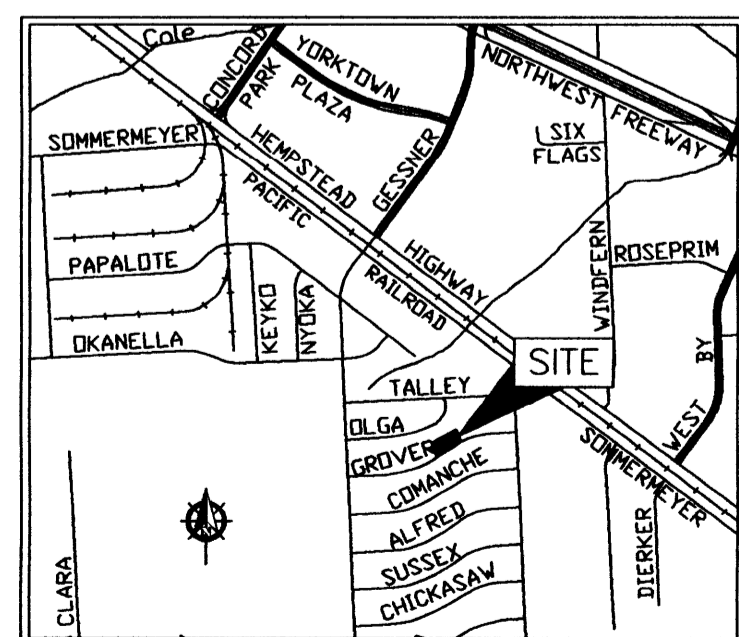
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PROPOSED OFFICE WAREHOUSE
 LOCATED AT
 10038 GROVER LANE
 HOUSTON, TEXAS 77041

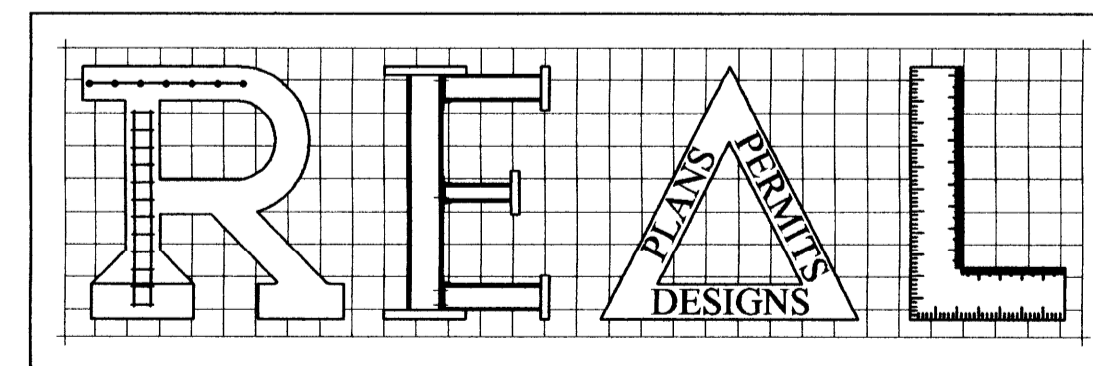
ADDRESS IDENTIFYING ADDRESS NUMBERS MUST BE POSTED ON BUILDING PRIOR TO FINAL INSPECTION
 CHAPTER 10 ARTICLE V OF THE CITY CODE OF ORDINANCES



All Insulation in Walls to be
 25 Flame Spread - 450 Smoke Development
 Ceilings Used as Return Air Plenum
 25 Flame Spread - 50 Smoke Development



VICINITY MAP
 NOT TO SCALE
 KEY MAP #415-W; ZIP CODE #77041



SPECIAL INSPECTIONS AS PER SECTION 1704 OF IBC REQUIRED FOR
 ✓ STEEL CONSTRUCTION PER TABLE 1704-3
 ✓ CONCRETE CONSTRUCTION PER TABLE 1704-4
 ✓ MASONRY CONSTRUCTION PER TABLE 1704-5.1 & 1704-5.3
 ✓ SOILS
 ✓ PILE FOUNDATION
 ✓ SPRAYED FIRE RESISTANT MATERIALS
 ✓ EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)
 ✓ SMOKE CONTROL
 ✓ SPECIAL CASES

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 Houston, Texas 77228

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DECEMBER 2014

CODE ANALYSIS

Scope of work: A proposed metal building used for office space and warehouse space. It is equipped with three restrooms and consists of 9,600 sq. ft.

Located at:
 10038 Grover Lane
 Houston, Texas 77041

Notice
 All paving installed over a utility easement shall have construction joints or saw cuts along the entire easement line of the encroachment and traverse the easement at intervals ≤ 10 feet.

APPLICABLE CODES (including, but not limited to)
 2006 International Building Code (IBC) w/City of Houston Amendments
 2006 Uniform Mechanical Code (UMC)
 2006 Uniform Plumbing Code (UPC)
 2014 National Electrical Code (NEC)
 2006 International Fire Code (IFC)
 2009 International Energy Conservation Code (IECC)

Texas Accessibility Code for Building Construction, Latest Edition
 City of Houston Ordinances

1. OCCUPANCY TYPE (IBC 311.3, p.37)

Group B (Business)
 Group S-1 (Warehouse/Storage)

OCCUPANT LOAD (IBC Table 1004.1.2 p. 195)

23 Occupants (Refer to Occupancy Summary)

2. PHYSICAL PROPERTIES OF BUILDING

Proposed metal building on concrete slab.
 1 story- 9,600 gross square feet total.

3. MINIMUM PLUMBING FACILITIES

Restroom: 3 water closets & 3 lavatories
 5 Gallon water bottle dispenser

4. CONSTRUCTION TYPE

Type II-B
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 Roofs and roof-ceiling construction 0 Hr (Table 601, p. 88)
 Fire-resistance for exterior walls greater than or equal to 30'-0" apart 0 Hr (Table 602, p. 87)

5. SPRINKLER SYSTEM

Fire Sprinkler NOT REQUIRED.

6. STORAGE NOTES

Proposed shop area, to be designated for non-hazardous material. Storage material shall consist on of steel objects and metal pipes lay-down within the storage zone. No equipment, machinery or storage rack will be used.

NOTICE

THIS PLAN MUST BE KEPT ON JOB FOR ALL CITY INSPECTIONS.
 A SEPARATE PERMIT IS REQUIRED FOR SIDEWALK - CURB AND GUTTER, DRIVEWAY, PLUMBING, AIR CONDITIONING, ELECTRICAL, SWIMMING POOLS, ELEVATORS AND SIGNS.

BUILDING PERMIT FOR THIS STRUCTURE IS ISSUED ON THE CONDITION THAT THE FINISHED FLOOR OF THE BUILDING IS NOT LESS THAN TWELVE INCHES (12") ABOVE THE NEAREST MANHOLE, OR WHERE NO SEWER IS AVAILABLE THE NEAREST FLOOR SHALL NOT BE LESS THAN FOUR INCHES (4") ABOVE THE CROWN OF THE STREET AND IN ALL INSTANCES AT OR ABOVE THE PROJECTED 100 YEAR BASE FLOOD ELEVATION, IF APPLICABLE.

APPROVED
 FOR BUILDING PERMIT ONLY
 CITY OF HOUSTON
 CODE ENFORCEMENT DIVISION

The owner is responsible for compliance with the Building Code. Such approved plans and specifications shall not be changed, modified or altered without authorizations from the building official, and all work shall be done in accordance with the approved plans.

02 JUL 2015 NO. 351

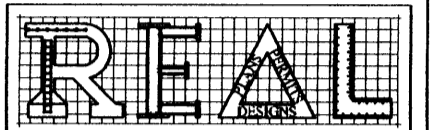
ACCESSIBILITY

It is the responsibility of the owner to ensure compliance with state and federal requirements. This jurisdiction has not contracted with the state and is not authorized to grant waivers or modifications. Perform review plans, or take any other action with respect to inspections, or take any other action with respect to compliance with state or federal accessibility requirements.

SIGN ADMINISTRATION APPROVAL REQUIRED FOR ALL COMMERCIAL SIGNS. SEPARATE PERMIT REQUIRED.

Glazing in Hazardous Locations Shall Comply with Section-R308 of I.R.C. for One and Two Family Dwellings OR Section-2406 of I.B.C. for Commercial Construction.

No.	DATE	DESCRIPTION
1		
2		



P.O. Box 23398
 Houston, Texas 77228
 Ph: 281-888-6747
 real_designs@live.com
 www.real-designs-inc.com

OWNER:

TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:

COVER SHEET

DATE: 12-03-14

DESIGN: 8613

DRAWN: 8613

SCALE: NO SCALE

JOB No: 14093033

FILE:

DRAWING

CS

STATE OF TEXAS
COUNTY OF HARRIS

We, HOSSEINI REAL ESTATES, LLC, acting by and through, hereinafter referred to as owners of the 0.552 acre tract described in the above and foregoing map of HOSSEINI ESTATES do hereby make and establish said subdivision and development plan of said property according to all lines, dedications, restrictions and notations on said maps or plat and hereby dedicate to the use of the public forever, all streets (except those streets disposed as private streets, or permanent access easements), alleys, parks, water courses, drains, easements and public places shown thereon for the purposes and considerations therein expressed, and do hereby bind ourselves, our heirs, successors and assigns to warrant and forever defend the title on the land so dedicated.

FURTHER, Owners have dedicated and by these presents do dedicate to the use of the public for public utility purpose forever unobstructed aerial easements. The aerial easements shall extend horizontally an additional eleven feet, six inches (11' 6") for ten feet (10' 0") perimeter ground easements or seven feet, six inches (7' 6") for fourteen feet (14' 0") perimeter ground easements or five feet, six inches (5' 6"), for sixteen feet (16' 0") perimeter ground easements, from a plane sixteen feet (16' 0") above the ground level upward, located adjacent to and adjoining said public utility easements that are designated with aerial easements (U.E. and A.E.) as indicated and depicted, hereon, whereby the aerial easement totals twenty one feet, six inches (21' 6") in width.

FURTHER, Owners have dedicated and by these presents do dedicate to the use of the public for public utility purpose forever unobstructed aerial easements. The aerial easements shall extend horizontally an additional ten feet (10' 0") for ten feet (10' 0") back-to-back ground easements or eight feet (8' 0") for fourteen feet (14' 0") back-to-back ground easements or seven feet (7' 0") for sixteen feet (16' 0") back-to-back ground easements, from a plane sixteen feet (16' 0") above ground level upward, located adjacent to both sides and adjoining said public utility easements that are designated with aerial easements (U.E. and A.E.) as indicated and depicted hereon, whereby the aerial easement totals thirty feet (30' 0") in width.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plat is hereby restricted to prevent the drainage of any septic tanks into any public or private street, permanent access easement, road or alley or any drainage ditch, either directly or indirectly.

FURTHER, Owners do hereby dedicate to the public a strip of land fifteen (15) feet wide on each side of the center line of any and all payouts, creeks, gullies, ravines, draws, sloughs or other natural drainage courses located in said plat, as easements for drainage purposes, giving the City of Houston, Harris County, or any other governmental agency, the right to enter upon said easement at any and all times for the purpose of construction and maintenance of drainage facilities and structures.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plat and adjacent to any drainage easement, ditch, gully, creek or natural drainage way shall hereby be restricted to keep such drainage ways and easements clear of fences, buildings, planting and other obstructions to the operations and maintenance of the drainage facility and that such abutting property shall not be permitted to drain directly into this easement except by means of an approved drainage structure.

FURTHER, Owners do hereby certify that this replat does not attempt to alter, amend, or remove any covenants or restrictions.

IN TESTIMONY WHEREOF, the HOSSEINI REAL ESTATES, LLC, has caused these presents to be signed by its Managing Member, thereunto authorized, in the City of Houston, Texas this ____ day of _____, 2014.

HOSSEINI REAL ESTATES, LLC

By: _____

STATE OF TEXAS
COUNTY OF HARRIS

BEFORE ME, the undersigned authority, on this day personally appeared known to me to be the person whose name is subscribed to the foregoing instrument and acknowledgment to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the ____ day of _____, 2014.

Notary Public in and for the State of Texas
Print Name: _____
My Commission Expires: _____

I, Mohammed Omar, am authorized (or registered) under the laws of the State of Texas to practice the profession of surveying and hereby certify that the above subdivision is true and accurate; was prepared from an actual survey of the property made under my supervision on the ground; that, except as shown all boundary corners, angle points, points of curvature and other points of reference have been marked with iron (or other objects of a permanent nature) pipes or rods having an outside diameter of not less than five eighths (5/8) inch and a length of not less than three (3) feet; and that the plat boundary corners have been tied to the Texas Coordinate System of 1983, South Central Zone.

Mohammed Omar
Texas Registration No. 5915

This is to certify that the Planning Commission of the City of Houston, Texas has approved this plat and subdivision of HOSSEINI ESTATES in conformance with the laws of the State of Texas and the ordinances of the City of Houston as shown hereon and authorized the recording of this plat this ____ day of _____, 2014.

By: MARK A. KILKENNY Or By: M. SONNY GARZA
Chair Vice-Chairman
By: PATRICK WALSH, P.E.
Secretary

I, Stan Stanart, County Clerk of Harris County, do hereby certify that the within instrument with its certificate of authentication was filed for registration in my office on _____, 2014, at _____ o'clock _____ M., and duly recorded on _____, 2014, at _____ o'clock _____ M., and at Film Code No. _____ of the Map Records of Harris County, for said county.

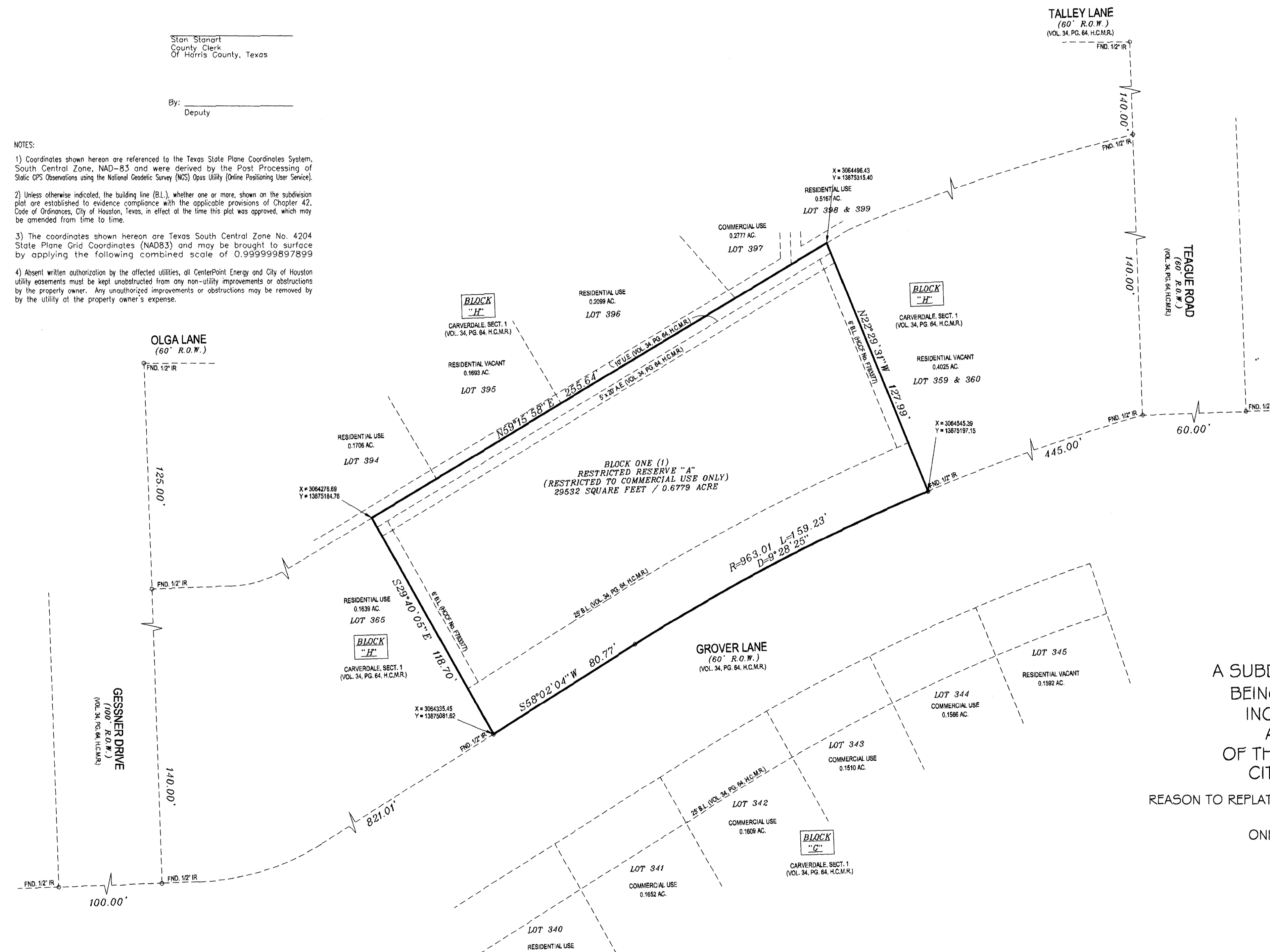
WITNESS MY HAND AND SEAL OF OFFICE, at Houston, the day and date last above written.

Stan Stanart
County Clerk
Of Harris County, Texas

By: _____
Deputy

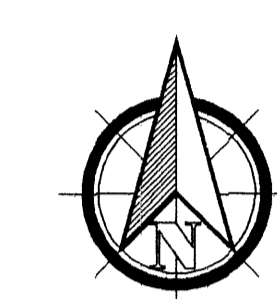
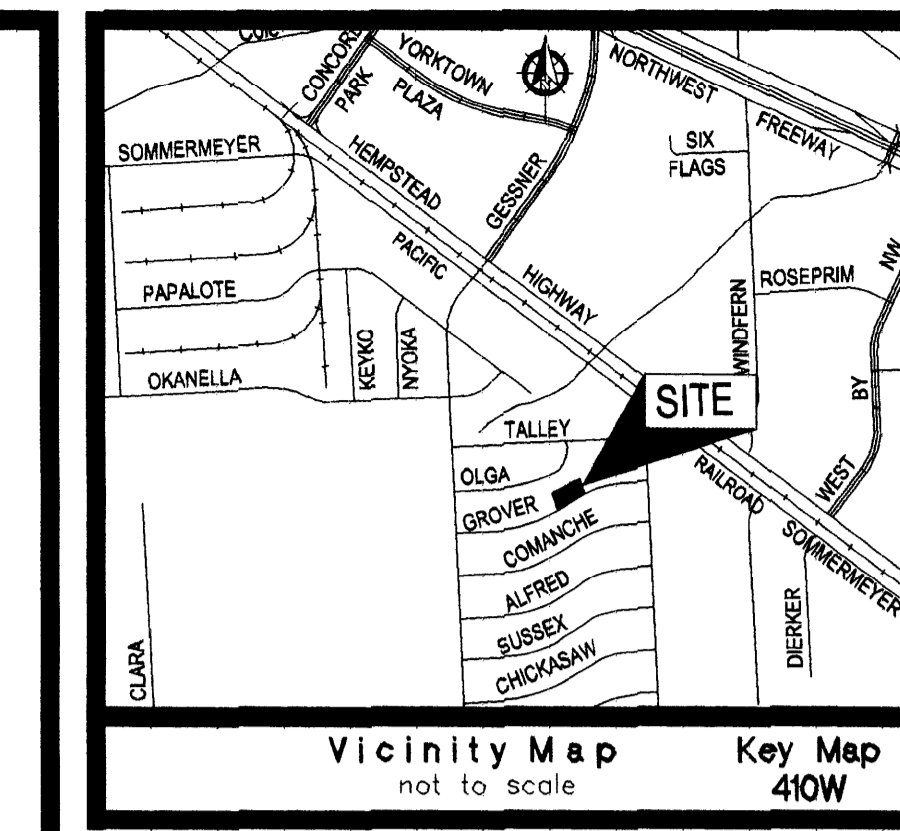
NOTES:

- Coordinates shown hereon are referenced to the Texas State Plane Coordinates System, South Central Zone, NAD-83 and were derived by the Post Processing of Static GPS Observations using the National Geodetic Survey (NS) Opus Utility (Online Positioning User Service).
- Unless otherwise indicated, the building line (B.L.), whether one or more, shown on the subdivision plat are established to evidence compliance with the applicable provisions of Chapter 42, Code of Ordinances, City of Houston, Texas, in effect of the time this plat was approved, which may be amended from time to time.
- The coordinates shown hereon are Texas South Central Zone No. 4204 State Plane Grid Coordinates (NAD83) and may be brought to surface by applying the following combined scale of 0.999999897899.
- Absent written authorization by the affected utilities, all CenterPoint Energy and City of Houston utility easements must be kept unobstructed from any non-utility improvements or obstructions by the property owner. Any unauthorized improvements or obstructions may be removed by the utility at the property owner's expense.



LEGEND:

- D.E. - Drainage Easement
- U.E. - Utility Easement
- A.E. - Unobstructed Aerial Easement
- B.L. - Building Line
- GAR. B.L. - Garage Building Line
- R.O.W. - RIGHT-OF-WAY
- - FOUND 5/8" IRON ROD
- - FOUND 1/2" IRON ROD



SCALE:
1"=30'
30 15 0 30 60

GUTTER DRAIN SWALLOWING POOLS, ELEVATION...
BUILDING PERMIT FOR THIS STRUCTURE IS ISSUED UNDER THE CONDITION THAT THE FINISHED FLOOR OF THE BUILDING IS NOT LESS THAN TWELVE INCHES (12") ABOVE THE NEAREST MANHOLE, OR WHERE NO SEWER IS AVAILABLE THE FINISHED FLOOR SHALL NOT BE LESS THAN FOUR INCHES (4") ABOVE THE CROWN OF THE STREET AND IN ALL INSTANCES AT OR ABOVE THE PROJECTED 100 YEAR BASE FLOOD ELEVATION, IF APPLICABLE.

HOSSEINI ESTATES

A SUBDIVISION OF A 0.6779 ACRE TRACT OF LAND BEING A REPLAT OF LOTS 361 - 364, BLOCK "H" INCLUSIVE OF THE CARVERDALE, SECTION 1 AS RECORDED IN VOLUME 34, PAGE 64, OF THE MAP RECORDS OF HARRIS COUNTY, TEXAS

REASON TO REPLAT: TO CREATE ONE (1) COMMERCIAL RESERVE AND ONE (1) BLOCK

ONE (1) RESTRICTED RESERVE AND ONE (1) BLOCK

OWNER:
HOSSEINI REAL ESTATES, LLC

DATE: FEBRUARY, 2015 SCALE: 1"=30'

REAL DESIGNS
P.O. BOX 2339B
HOUSTON, TEXAS 77228
832-654-7862

HAWKLAND SURVEYING
527 BELWIN DRIVE KATY, TEXAS 77450
PH: (281) 855-8495
WWW.HAWKLAND-SURVEYING.COM

We, HOSSEINI REAL ESTATES, LLC, acting by and through, Arash Hosseini, its Managing Member, do hereby make and establish said subdivision and development plan of said property according to all laws, regulations, restrictions and ordinances on said maps or plat and hereby dedicate to the use of the public, all streets (except those streets designated as private streets or permanent easements), drains, ponds, water courses, drainage easements and public places shown thereon for the purposes and considerations herein expressed, and do hereby bind ourselves, our heirs, successors and assigns to warrant and forever defend the title on the land so dedicated.

FURTHER, Owners have dedicated and by these presents do dedicate to the use of the public for public utility purpose forever unobstructed aerial easements. The aerial easements shall extend horizontally an additional eleven feet, six inches (11' 6") for ten feet (10' 0") perimeter ground easements or seven feet, six inches (7' 6") for fourteen feet (14' 0") perimeter ground easements or five feet, six inches (5' 6"), for sixteen feet (16' 0") perimeter ground easements, from a plane sixteen feet (16' 0") above the ground level upward, located adjacent to and adjoining said public utility easements that are designated with aerial easements (U.E. and A.E.) as indicated and depicted, hereon, whereby the aerial easement totals twenty one feet, six inches (21' 6") in width.

FURTHER, Owners have dedicated and by these presents do dedicate to the use of the public for public utility purpose forever unobstructed aerial easements. The aerial easements shall extend horizontally and additional ten feet (10' 0") for ten feet (10' 0") back-to-back ground easements or eight feet (8' 0") for fourteen feet (14' 0") back-to-back ground easements or seven feet (7' 0") for sixteen feet (16' 0") back-to-back ground easements, from a plane sixteen feet (16' 0") above ground level upward, located adjacent to and adjoining said public utility easements that are designated with aerial easements (U.E. and A.E.) as indicated and depicted, hereon, whereby the aerial easement totals thirty feet (30' 0") in width.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plot is hereby restricted to prevent the drainage of any septic tanks into any public or private street, permanent access easement, road or alley or any drainage ditch, either directly or indirectly.

FURTHER, Owners do hereby dedicate to the public a strip of land fifteen (15) feet wide on each side of the center line of any and all bays, creeks, gullies, ravines, draws, sloughs or other natural drainage courses located in said plot, as easements for drainage purposes, giving the City of Houston, Harris County, or any other governmental agency, the right to enter upon said easement at any and all times for the purpose of construction and maintenance of drainage facilities and structures.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plot and adjacent to any drainage easement, ditch, gully, creek or natural drainage way shall hereby be restricted to keep such drainage ways and easements clear of fences, buildings, planting and other obstructions to the operations and maintenance of the drainage facility and that such obutting property shall not be permitted to drain directly into this easement except by means of an approved drainage structure.

FURTHER, Owners do hereby certify that this report does not attempt to alter, amend, or remove any covenants or restrictions, we further certify that no portion of the preceding plat was limited by deed restriction to residential use for not more than two(2) residential units per lot.

IN TESTIMONY WHEREOF, the HOSSEINI REAL ESTATES, LLC, has caused these presents to be signed by Arash Hosseini, its Managing Member, thereunto authorized, in the City of Houston, Texas this 2nd day of April, 2015.

HOSSEINI REAL ESTATES, LLC
By: Arash Hosseini
Arash Hosseini, MANAGING MEMBER

BEFORE ME, the undersigned authority, on this day personally appeared KEVIN C GAW, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledgment to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 2nd day of April, 2015.

KEVIN C GAW
My Commission Expires March 6, 2016
Notary Public in and for the State of Texas
Print Name: Kevin Caw
My Commission Expires: 03/06/2016

I, Georg R. Lardizabal, am authorized (or registered) under the laws of the State of Texas to practice the profession of surveying and hereby certify that the above subdivision is true and accurate; was prepared from an actual survey of the property made under my supervision on the ground; that, except as shown all boundary corners, angle points, points of curvature and other points of reference have been marked with iron (or other objects of permanent nature) pipes or rods having an outside diameter of not less than five eighths (5/8) inch and a length of not less than three (3) feet; and that the plat boundary corners have been tied to the Texas Coordinate System of 1983, South Central Zone.

Georg R. Lardizabal
Texas Registration No. 8051

This is to certify that the Planning Commission of the City of Houston, Texas has approved this plat and subdivision of HOSSEINI ESTATES in conformance with the laws of the State of Texas and the ordinances of the City of Houston as shown hereon and authorized the recording of this plat this 11th day of June, 2015.

MARK A. KILKENNY, Chair
M. SONY GAYZA, Vice-Chairman
JOSU B. BANE KHABO, Secretary
PATRICK WALSH, P.E., Secretary

I, Stan Starnat, County Clerk of Harris County, do hereby certify that the within instrument with its certificate of authentication was filed for registration in my office on June 19, 2015, at 1:35 o'clock P.M., and duly recorded on June 19, 2015, at 2:30 o'clock P.M., and at Film Code No. 1679 B022 of the Map Records of Harris County, for said county.

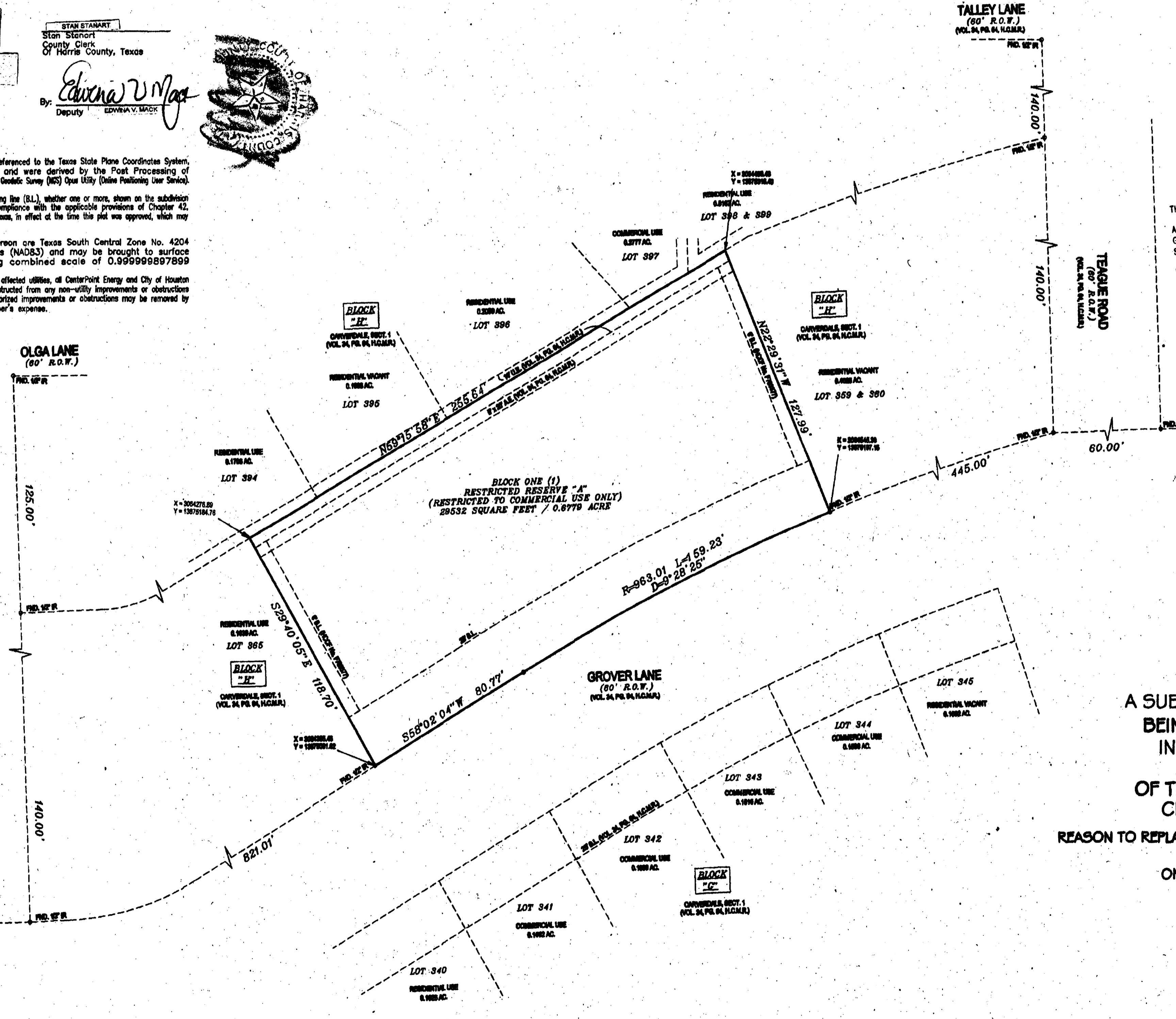
WITNESS MY HAND AND SEAL OF OFFICE, at Houston, the day and date last above written.

ANY PROVISION HEREIN WHICH RESTRICTS THE SALE, RENTAL OR USE OF THE DESCRIBED REAL PROPERTY BECAUSE OF COLOR OR RACE IS UNLAWFUL AND UNENFORCEABLE UNDER FEDERAL LAW.

This certificate is void if it is to the instrument on which the original signature is affixed and only then to the extent that such instrument is not altered or changed after recording.

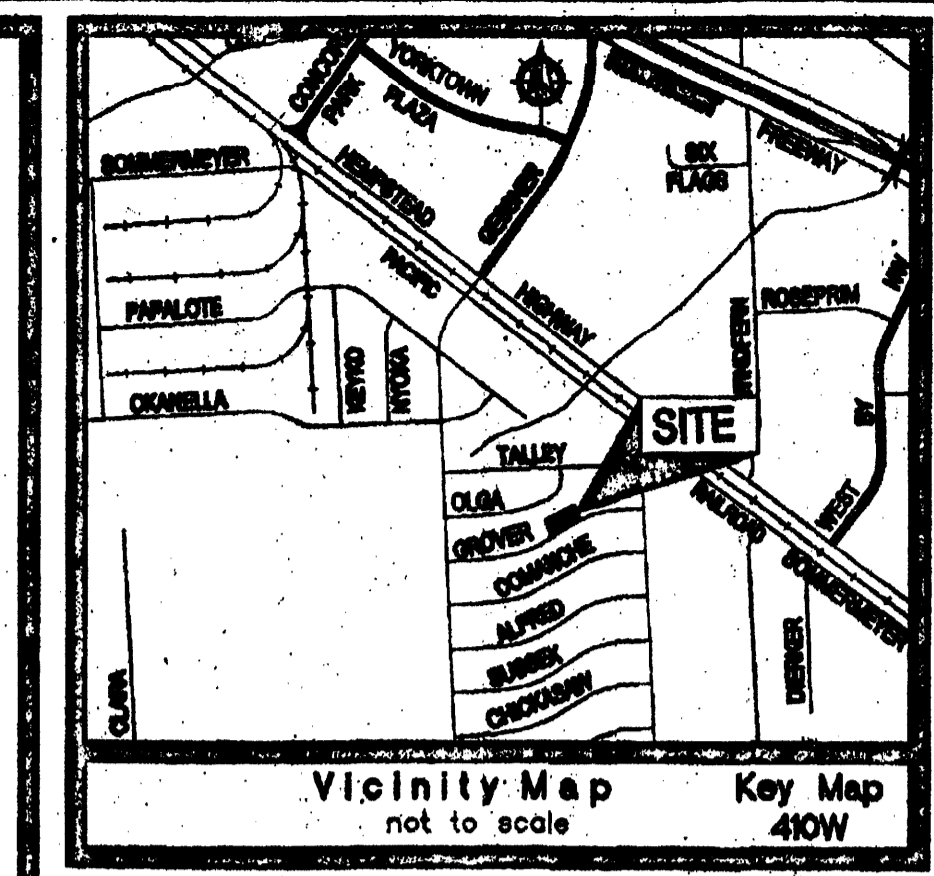
STAN STARNAT
Stan Starnat
County Clerk
Of Harris County, Texas
By: Edwina V. Magr
Deputy

- NOTES:
- Coordinates shown hereon are referenced to the Texas State Plane Coordinates System, South Central Zone, NAD-83 and were derived by the Post Processing of Static GPS Observations using the National Geospatial Survey (NGS) Open Utility (Online Positioning User Service).
 - Unless otherwise indicated, the building line (BL), whether one or more, shown on the subdivision plat are established to evidence compliance with the applicable provisions of Chapter 42, Code of Ordinances, City of Houston, Texas, in effect at the time this plat was approved, which may be amended from time to time.
 - The coordinates shown hereon are Texas South Central Zone No. 4204 State Plane Grid Coordinates (NAD83) and may be brought to surface by applying the following combined scale of 0.999999897899.
 - Absent written authorization by the affected utilities, all CenterPoint Energy and City of Houston utility easements must be kept unobstructed from any non-utility improvements or obstructions by the property owner. Any unauthorized improvements or obstructions may be removed by the utility at the property owner's expense.



20150267103
6/19/2015 HCCPRP2 60.00
FILED
6/19/2015 1:35 PM
Stan Starnat
COUNTY CLERK

LEGEND:
D.E - Drainage Easement
U.E - Utility Easement
A.E - Unobstructed Aerial Easement
BL - Building Line
GAR BL - Garage Building Line
R.O.W. - RIGHT-OF-WAY
● - FOUND 5/8" IRON ROD
○ - FOUND 1/2" IRON ROD



SCALE: 1"=30'

NOTICE
THIS PLAN MUST BE KEPT ON JOB FOR ALL CITY INSPECTIONS
A SEPARATE PERMIT IS REQUIRED FOR SIDEWALK - CURB AND GUTTER, DRIVEWAY, PLUMBING, AIR CONDITIONING, ELECTRICAL, SWIMMING POOLS, ELEVATORS AND SIGNS.
BUILDING PERMIT FOR THIS STRUCTURE IS ISSUED ON THE CONDITION THAT THE FINISHED FLOOR OF THE BUILDING IS NOT LESS THAN TWELVE INCHES (12") ABOVE THE NEAREST MANHOLE, OR WHERE NO SEWER IS AVAILABLE THE FINISHED FLOOR SHALL NOT BE LESS THAN FOUR INCHES (4") ABOVE THE CROWN OF THE STREET AND IN ALL INSTANCES AT OR ABOVE THE PROJECTED 100 YEAR BASE FLOOD ELEVATION, IF APPLICABLE.

OFFICE OF
STAN STARNAT
COUNTY CLERK, HARRIS COUNTY, TEXAS
MAP RECORDS OF COUNTY CLERK
FILM CODE 674882
HOSSEINI ESTATES
THIS IS PAGE 1 OF 2 PAGES
SCANNER Context IQ400
KEY MAP

HOSSEINI ESTATES
A SUBDIVISION OF A 0.6779 ACRE TRACT OF LAND BEING A REPLAT OF LOTS 361 - 364, BLOCK "H" INCLUSIVE OF THE CARVERDALE, SECTION 1, AS RECORDED IN VOLUME 34, PAGE 64, OF THE MAP RECORDS OF HARRIS COUNTY, TEXAS CITY OF HOUSTON, HARRIS COUNTY, TEXAS

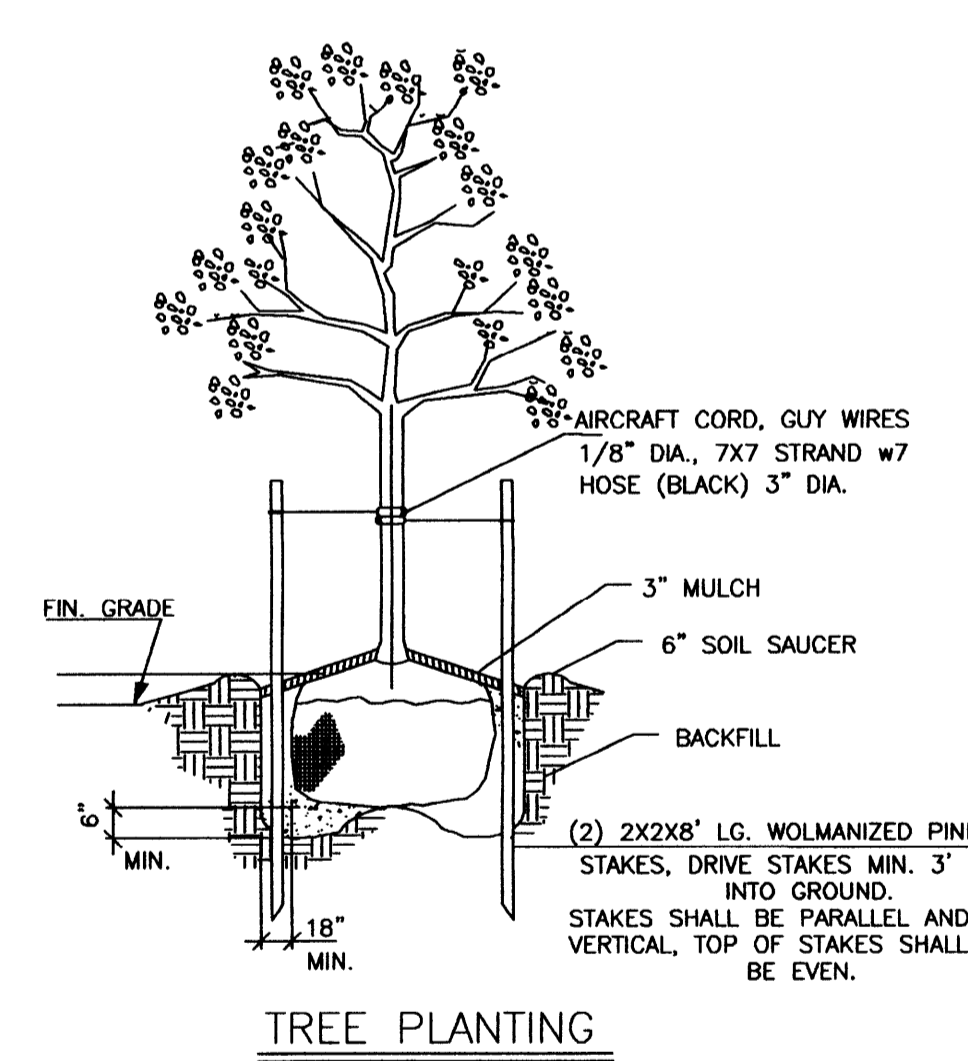
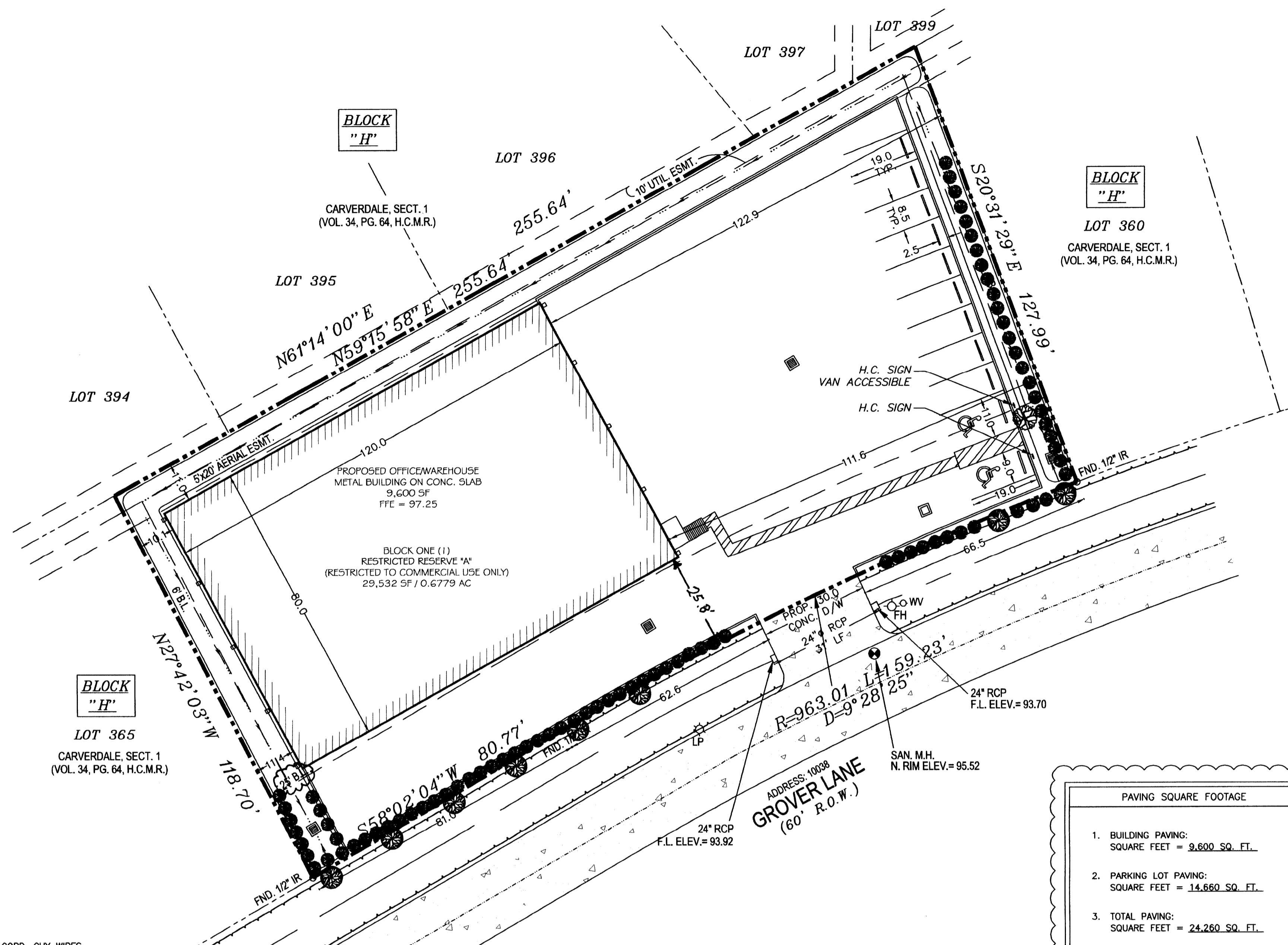
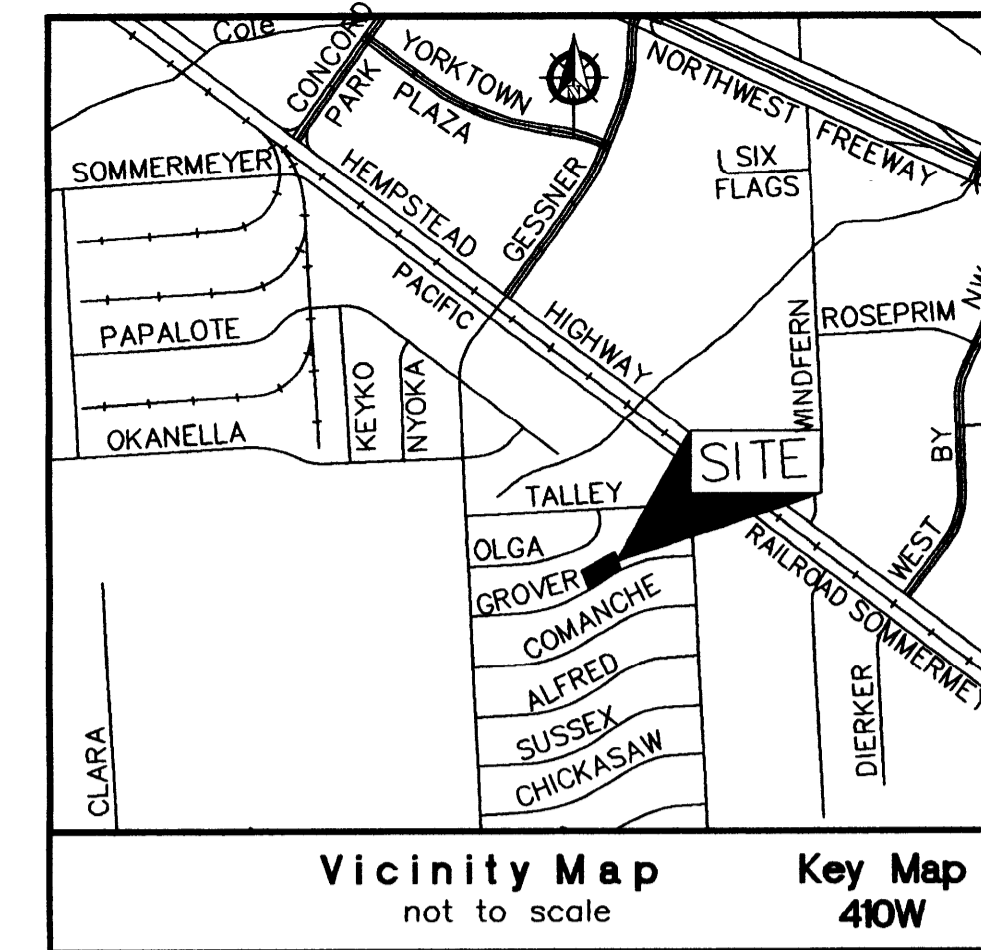
REASON TO REPLAT: TO CREATE ONE (1) COMMERCIAL RESERVE AND ONE (1) BLOCK ONE (1) RESTRICTED RESERVE AND ONE (1) BLOCK

OWNER:
HOSSEINI REAL ESTATES, LLC

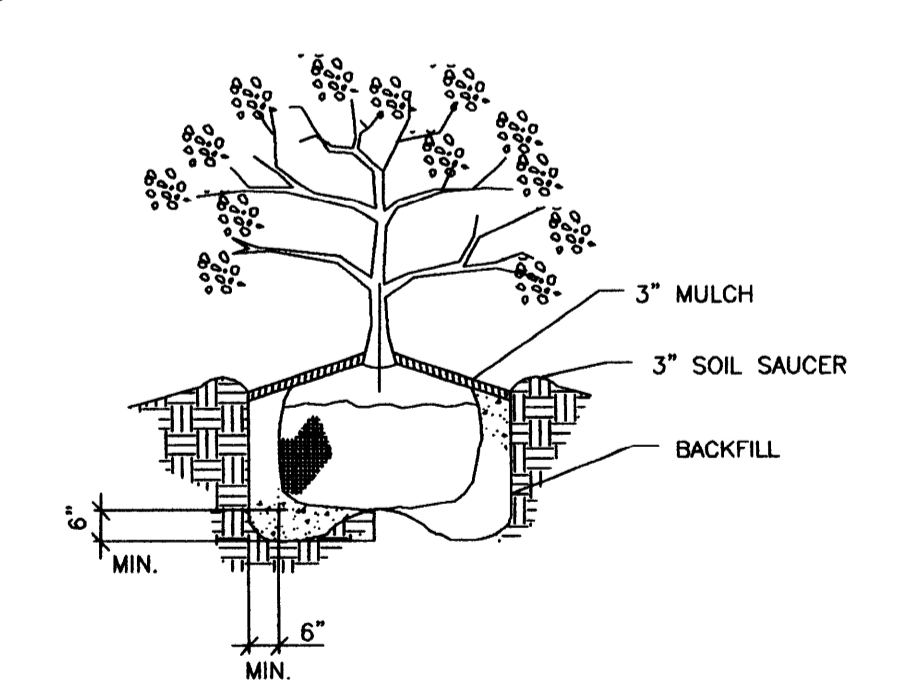
DATE: APRIL, 2015 SCALE: 1"=30'
REAL DESIGNS
P.O. BOX 23396
HOUSTON, TEXAS 77226
832-654-7062

GCC SURVEY
FIRM NUMBER 10146000
4419 ZIMMERLY COURT, SUGAR LAND, TEXAS 77479
PH: (832)729-7256
rpls6051@yahoo.com

REPRODUCING OR TRANSMITTING IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE SURVEYOR IS STRICTLY PROHIBITED.



TREE PLANTING
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE

PAVING SQUARE FOOTAGE	
1. BUILDING PAVING:	SQUARE FEET = 9,600 SQ. FT.
2. PARKING LOT PAVING:	SQUARE FEET = 14,660 SQ. FT.
3. TOTAL PAVING:	SQUARE FEET = 24,260 SQ. FT.

CITY OF HOUSTON DEPARTMENT OF PLANNING AND DEVELOPMENT PARKING LOT ANALYSIS	
1. OFFICE (B)	SQUARE FEET = 1,080 SQ. FT.
NUMBER OF PARKING SPACES REQUIRED @ OFFICE: OFFICE (1,080/1000) * 2.5 = 3	
2. STORAGE/WAREHOUSE (S-1)	SQUARE FEET = 8,520 SQ. FT.
NUMBER OF PARKING SPACES REQUIRED @ STO/WAREHOUSE: STO/WAREHOUSE (8,520/7000) * 1 = 2	
3. TOTAL NUMBER OF PARKING SPACES REQUIRED:	5
TOTAL NUMBER OF PARKING SPACES PROVIDED:	11

Approved Only for Water/Sewer
Point of Connection

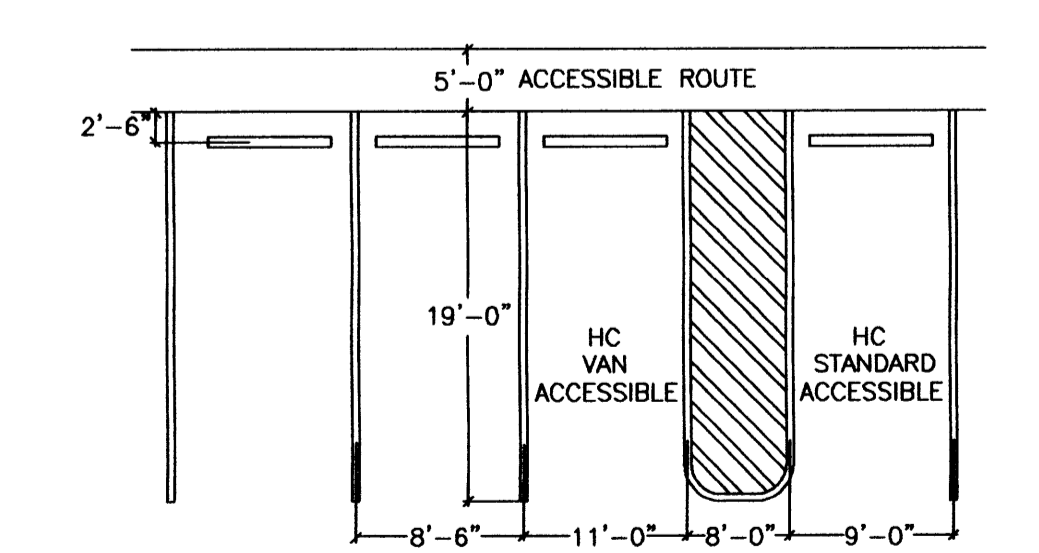
Water P.O.C. 6" GROVER LANE

Sewer P.O.C. 8" GROVER LANE

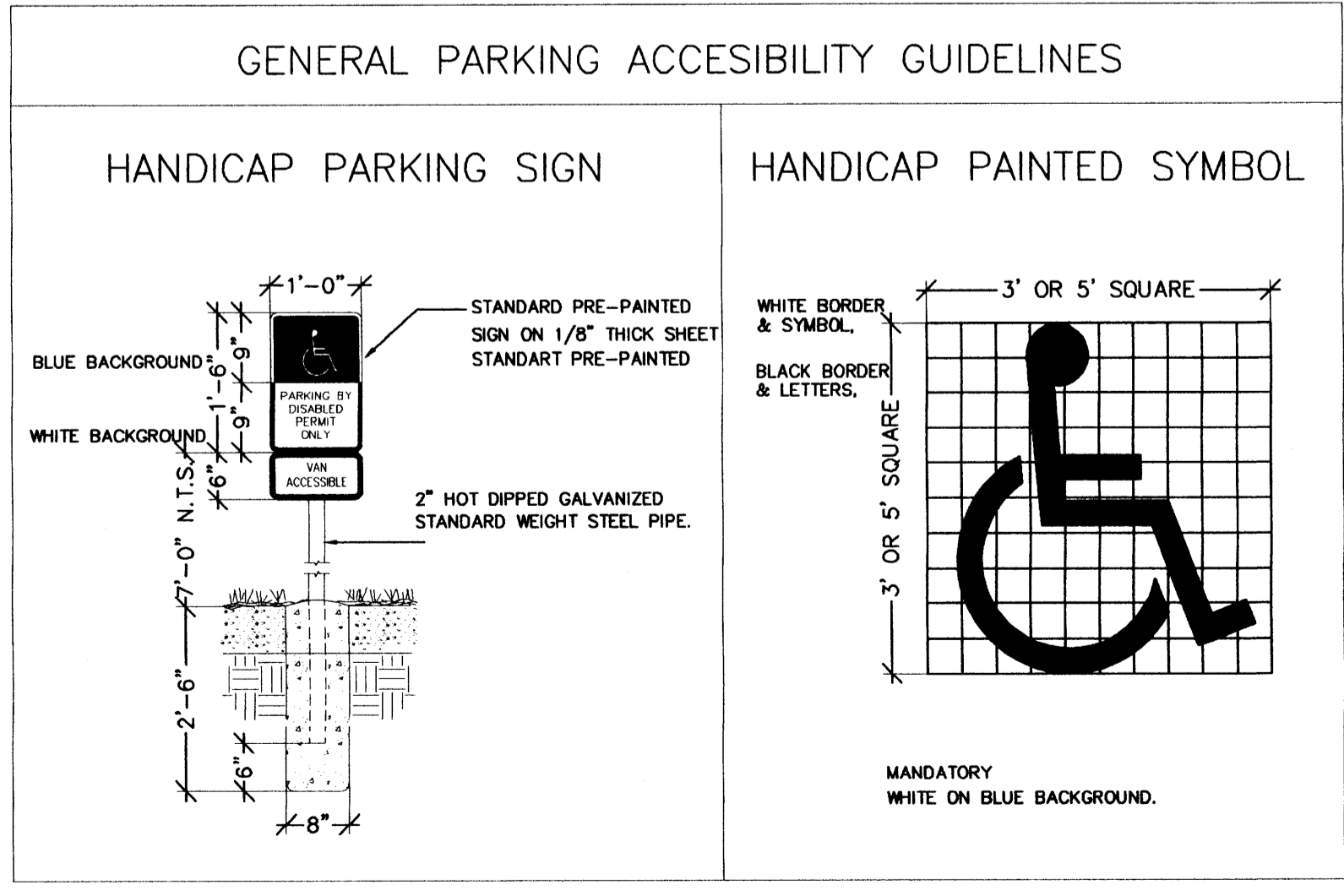
ILMS Project Number 1503 4588

Date 6/8/15 Checked by MC

PLANT SCHEDULE				
KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	REMARKS
	8	ULMUS CRASSIFOLIA	(STREET TREES) CEDAR ELM	3" CAL. STRAIGHT SINGLE TRUNK FULL SYMMETRICAL HEAD 50'-70' HT. X 40'-60' SPREAD
	1	FRAXINUS PENNSYLVANICA	(PARKING LOT TREES) GREEN ASH	3" CAL. STRAIGHT SINGLE TRUNK FULL SYMMETRICAL HEAD 60' HT. X 45'-50' SPREAD
	80	LELICOPHYLLUM FRUTESCENS	(SHRUBS) TEXAS SAGES	3 CAL. 18" MIN. HEIGHT AND 18" WIDTH



1 DIMENSION OF PARKING SPACES (TYP.)
NO SCALE



-LANDSCAPE ANALYSIS

A. STREET TREES:
LENGTH OF PROPERTY LINE IN LINEAL FEET AS MEASURED ALONG ALL SIDES OF THE PROPERTY FRONTING ON A MAJOR THOROUGHFARE STREET(S) 240.0' LINEAL FEET/30 = 8 STREET TREES REQUIRED.
(STAFF MAY CREATE AN ARTIFICIAL LOT)

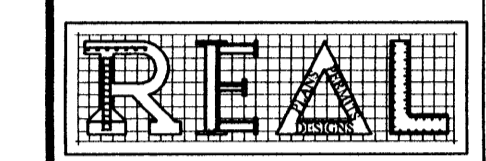
B. PARKING LOT TREES:
NUMBER OF PARKING STALLS CONSTRUCTED 10 /10 = 1 PARKING LOT TREES REQUIRED

C. TOTAL TREE REQUIREMENT:
A + B = 9 TOTAL NUMBER OF STREET AND PARKING LOT TREES REQUIRED.

F. SHRUBS: (ARE REQUIRED FOR NEW OR THE EXPANDED PORTION OF PARKING LOTS)
TOTAL NUMBER OF STREET TREES REQUIRED, FROM A ABOVE X 10 = 80 SHRUBS.

G. LANDSCAPE BUFFER:
6' HIGH SCREENING FENCE, OR 15' WIDE EVERGREEN PLANTING STRIP ALONG THE TOTAL LENGTH OF PROPERTY LINE ADJACENT TO EXISTING SINGLE-FAMILY RESIDENTIAL, OR LIMIT OF EXPANSION ADJACENT TO EXISTING SINGLE-FAMILY RESIDENTIAL. (SITE PLAN MUST SHOW LAND USE ON ALL SIDES OF THE PROPERTY).

REVISIONS	NO.	DATE	DESCRIPTION
	1		
	2		



P.O. BOX
23398
Houston, Texas 77228
Ph: 281-888-6747
real_designs@live.com
www.real-designs-inc.com

OWNER:
TRUCK SALES

PROPOSED
METAL BUILDING
FOR OFFICE WAREHOUSE
LOCATED AT
10038 GROVER LANE
HOUSTON, TEXAS 77041

DRAWING TITLE:
SITE PLAN

DATE: 12-03-14

DESIGN: 8530

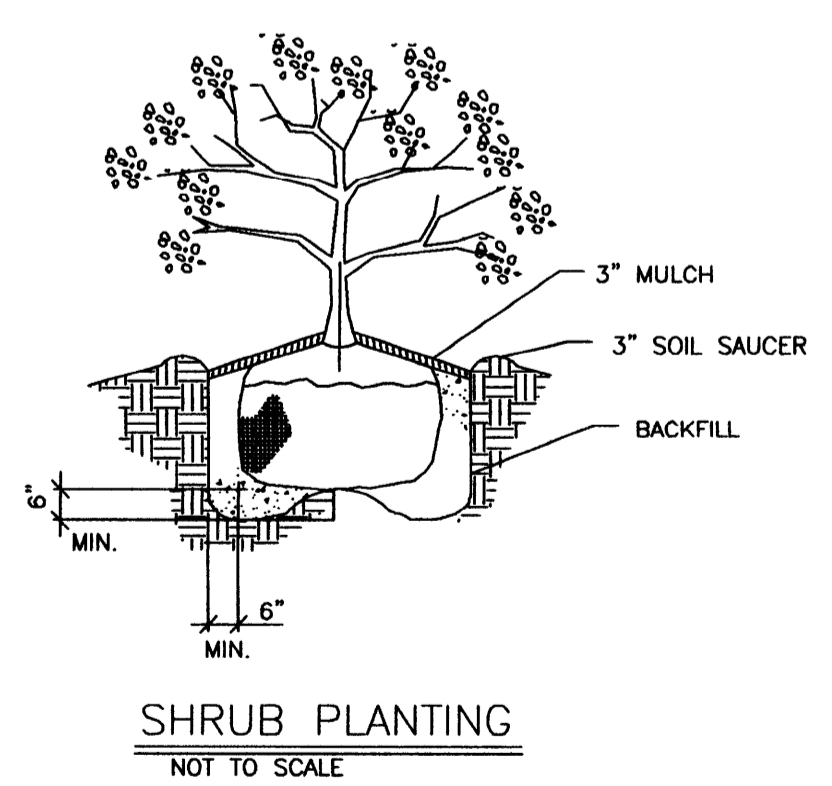
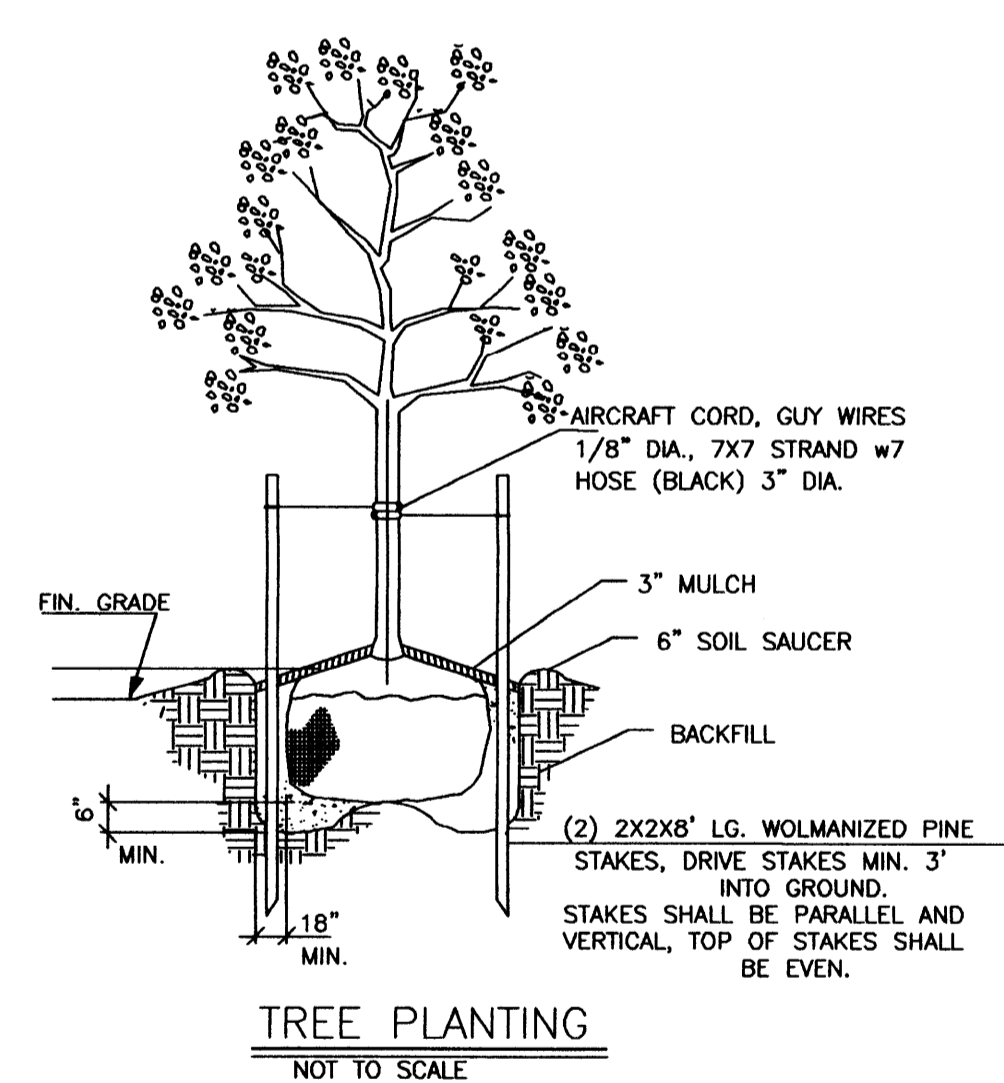
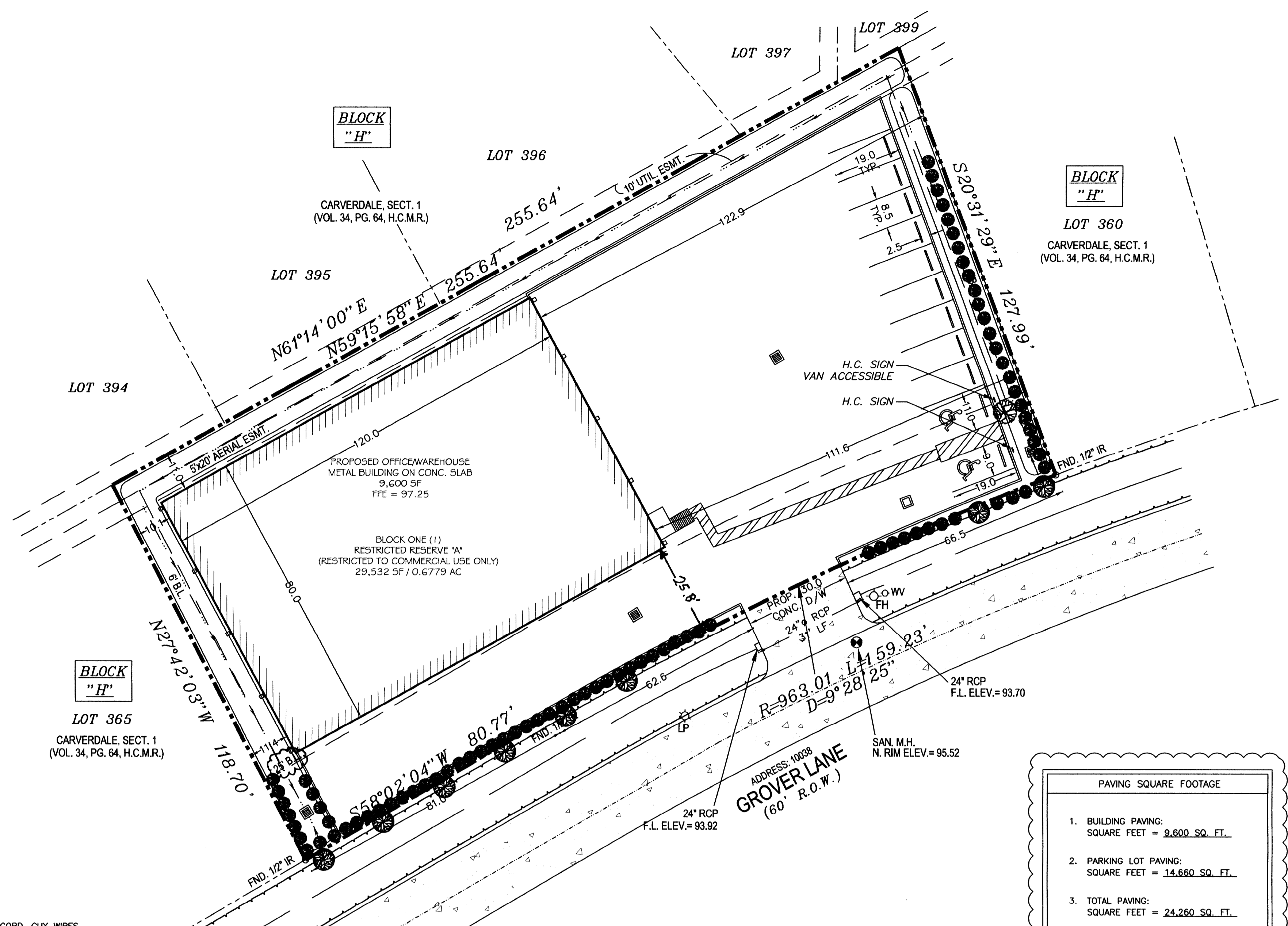
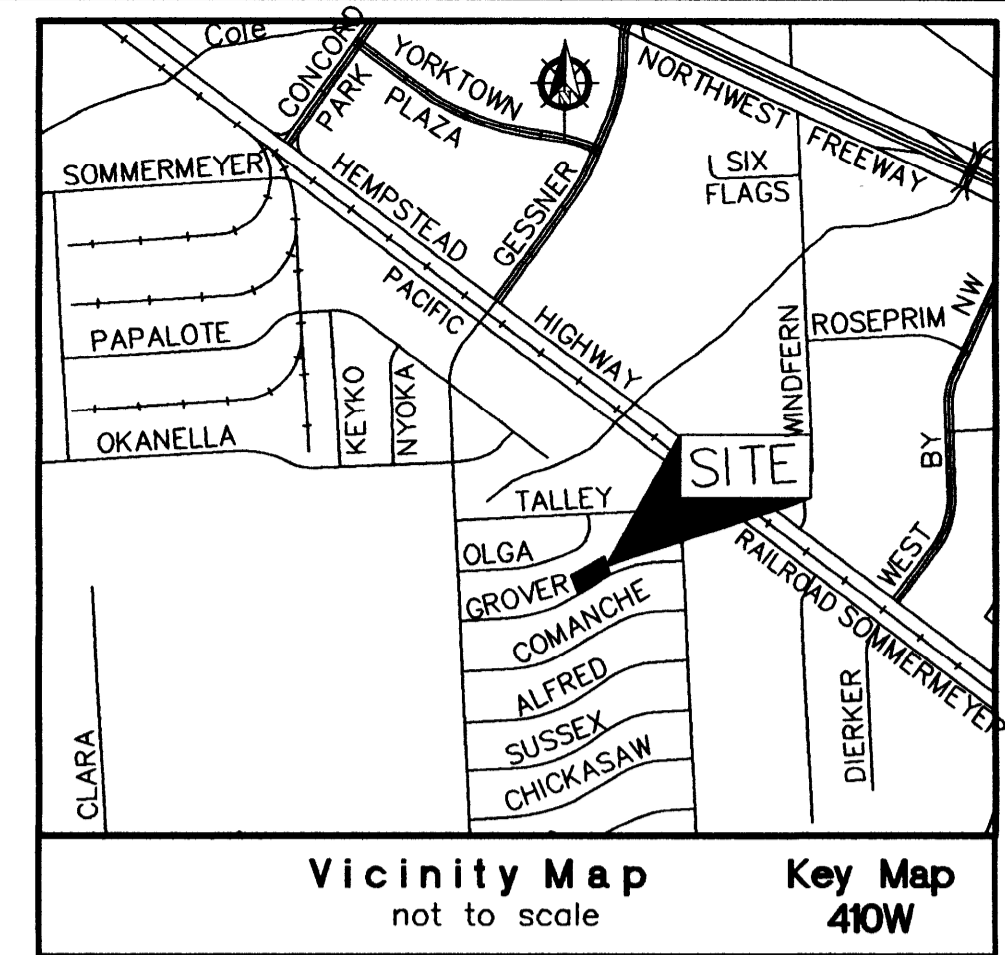
DRAWN: 8530

SCALE: 1:20

JOB No: 14093033

FILE:

DRAWING

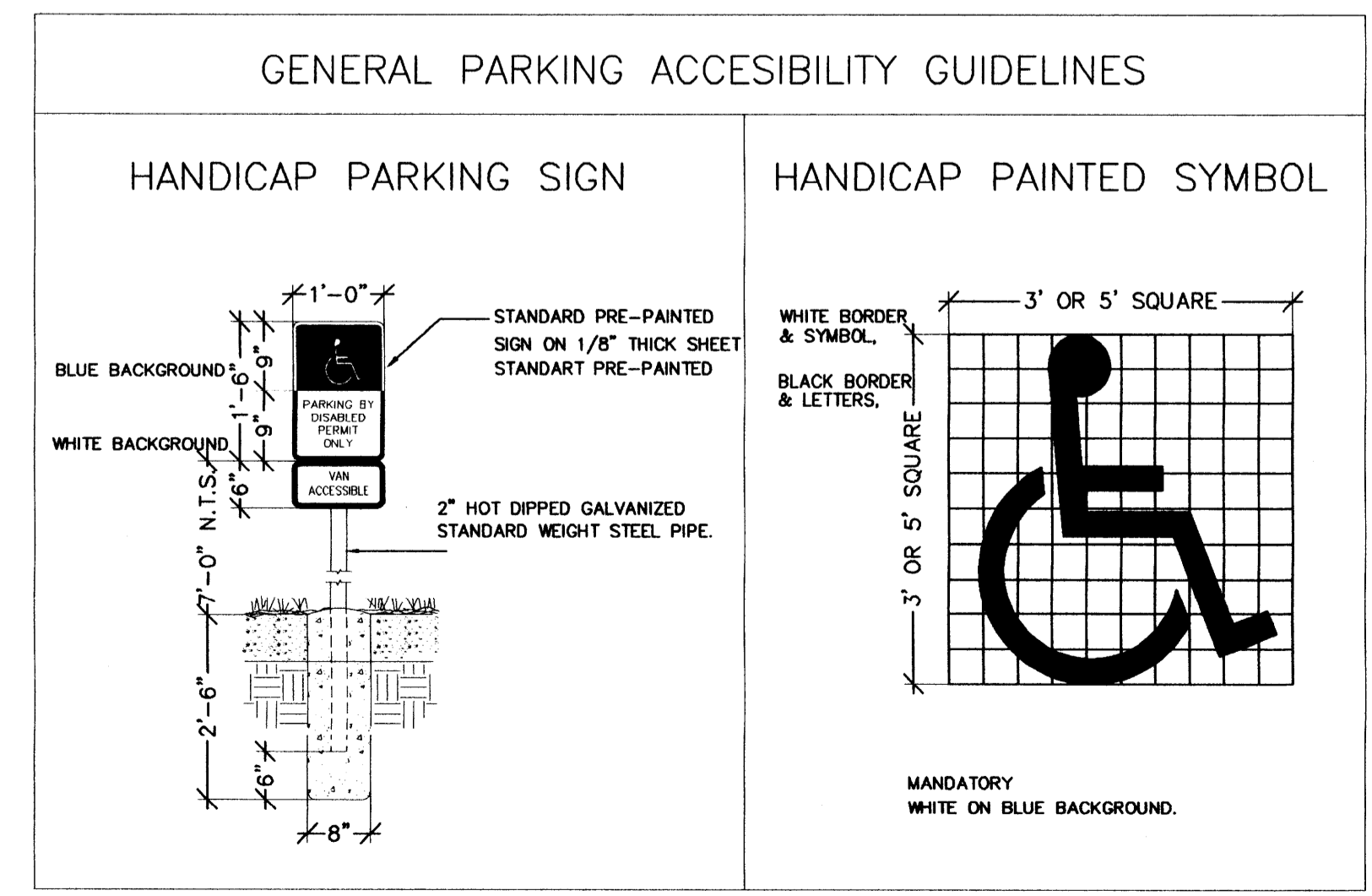
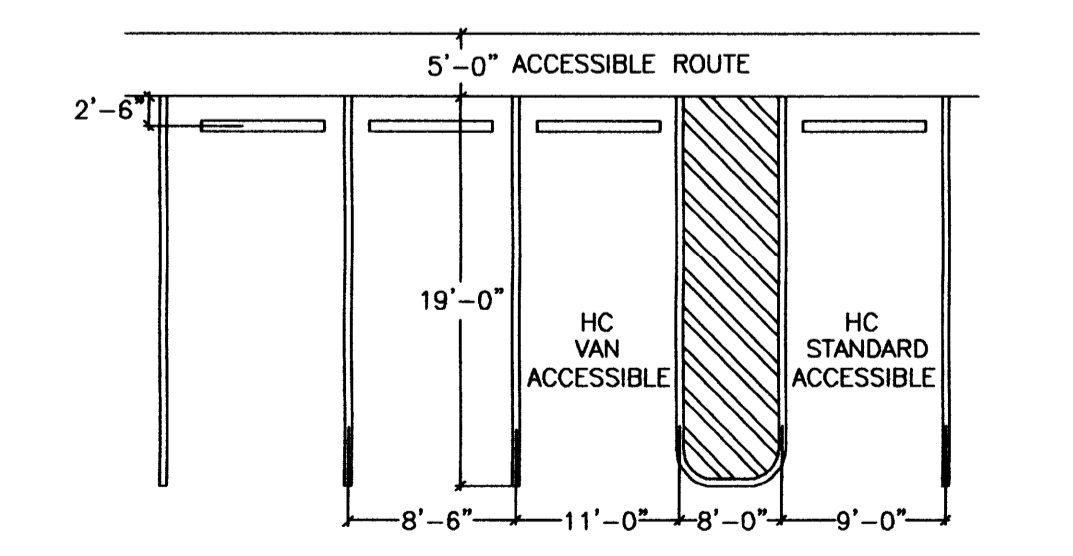


KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	REMARKS
	8	ULMUS CRASSIFOLIA	(STREET TREES) CEDAR ELM	3" CAL.	STRAIGHT SINGLE TRUNK FULL SYMMETRICAL HEAD 80'-70' HT. X 40'-60' SPREAD
	1	FRAXINUS PENNSYLVANICA	(PARKING LOT TREES) GREEN ASH	3" CAL.	STRAIGHT SINGLE TRUNK FULL SYMMETRICAL HEAD 80' HT. X 45'-50' SPREAD
	80	LEUCOPHYLLUM FRUTESCENS	(SHRUBS) TEXAS SAGES	3 GAL.	18" MIN. HEIGHT AND 18" WIDTH

PAVING SQUARE FOOTAGE	
1. BUILDING PAVING:	SQUARE FEET = 9,600 SQ. FT.
2. PARKING LOT PAVING:	SQUARE FEET = 14,860 SQ. FT.
3. TOTAL PAVING:	SQUARE FEET = 24,260 SQ. FT.

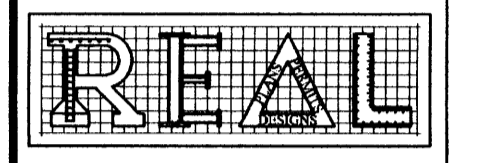
CITY OF HOUSTON DEPARTMENT OF PLANNING AND DEVELOPMENT PARKING LOT ANALYSIS	
1. OFFICE (B)	SQUARE FEET = 1,080 SQ. FT.
NUMBER OF PARKING SPACES REQUIRED @ OFFICE: OFFICE (1,080/1000) * 2.5 = 3	
2. STORAGE/WAREHOUSE (S-1)	SQUARE FEET = 8,520 SQ. FT.
NUMBER OF PARKING SPACES REQUIRED @ STO/WAREHOUSE: STO/WAREHOUSE (8,520/7000) * 1 = 2	
3. TOTAL NUMBER OF PARKING SPACES REQUIRED:	5
TOTAL NUMBER OF PARKING SPACES PROVIDED:	11

Approved Only for Water/Sewer Point of Connection
 Water P.O.C. 6" GROVER LANE
 Sewer P.O.C. 8" GROVER LANE
 ILMS Project Number 1503 4588
 Date 6.8.15 Checked by KC



- LANDSCAPE ANALYSIS
- A. STREET TREES:
LENGTH OF PROPERTY LINE IN LINEAL FEET AS MEASURED ALONG ALL SIDES OF THE PROPERTY FRONTING ON A MAJOR THOROUGHFARE STREET(S) 240.0' LINEAL FEET/30' = 8 STREET TREES REQUIRED. (STAFF MAY CREATE AN ARTIFICIAL LOT)
- B. PARKING LOT TREES:
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- C. TOTAL TREE REQUIREMENT:
A + B = 9 TOTAL NUMBER OF STREET AND PARKING LOT TREES REQUIRED.
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NO.	DATE	DESCRIPTION
1		
2		



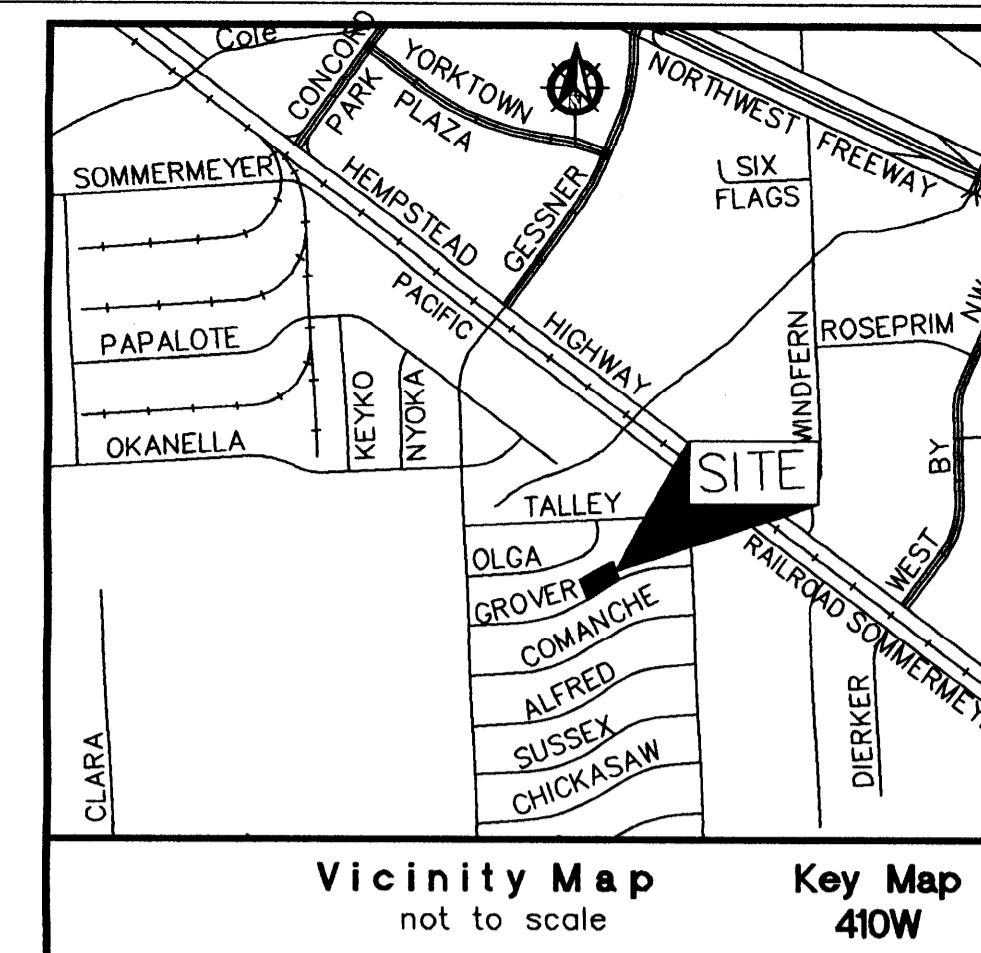
P.O. BOX 23398
Houston, Texas 77228
Ph: 281-888-6747
real_designs@live.com
www.real-designs-inc.com

OWNER: TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE: SITE PLAN

DATE:	12-03-14
DESIGN:	8530
DRAWN:	8530
SCALE:	1:20
JOB No:	14093033
FILE:	
DRAWING	



REVISIONS	DATE	DESCRIPTION
1		
2		



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OWNER:

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PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:

SITE PLAN

DATE: **12-03-14**

DESIGN: **8530**

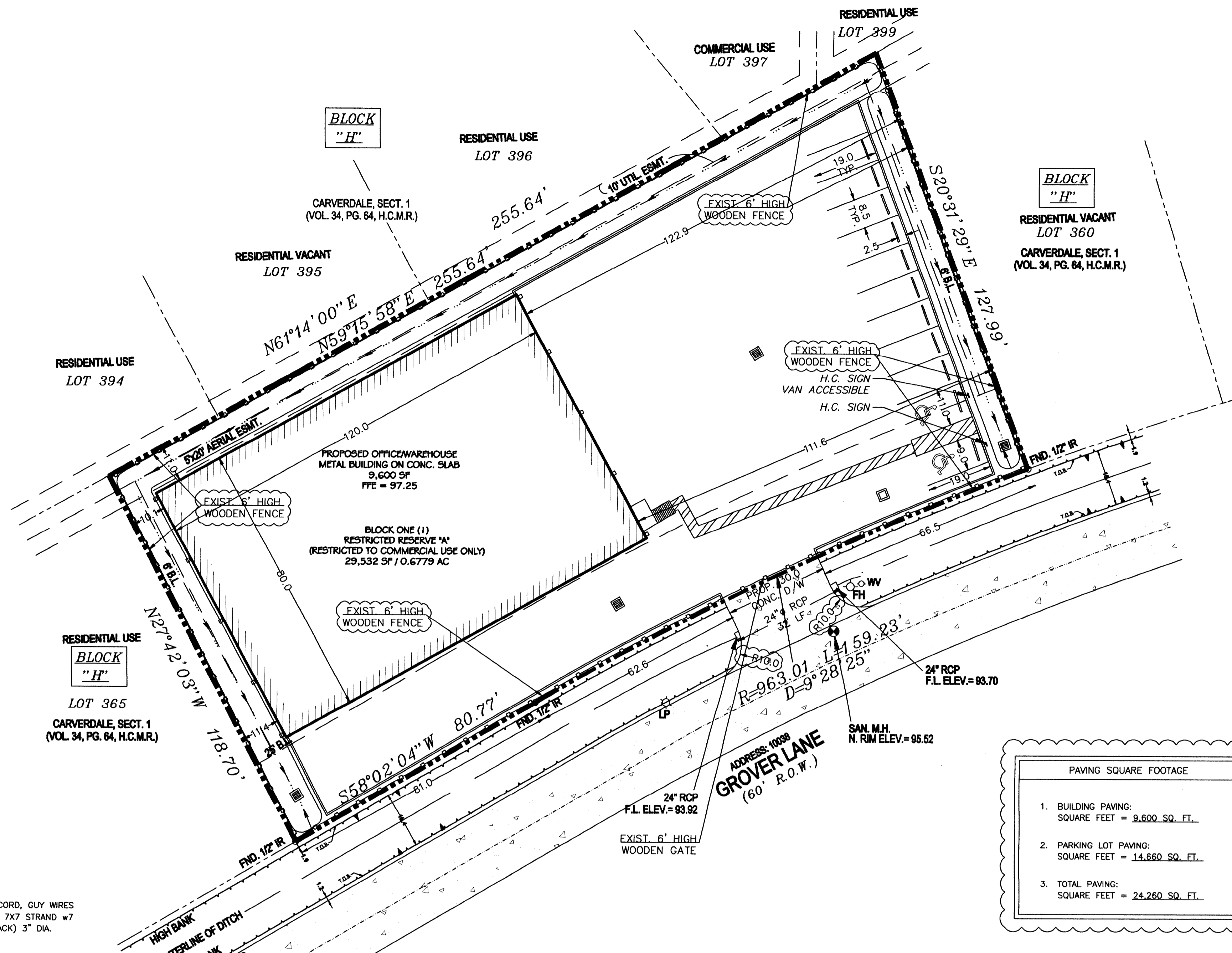
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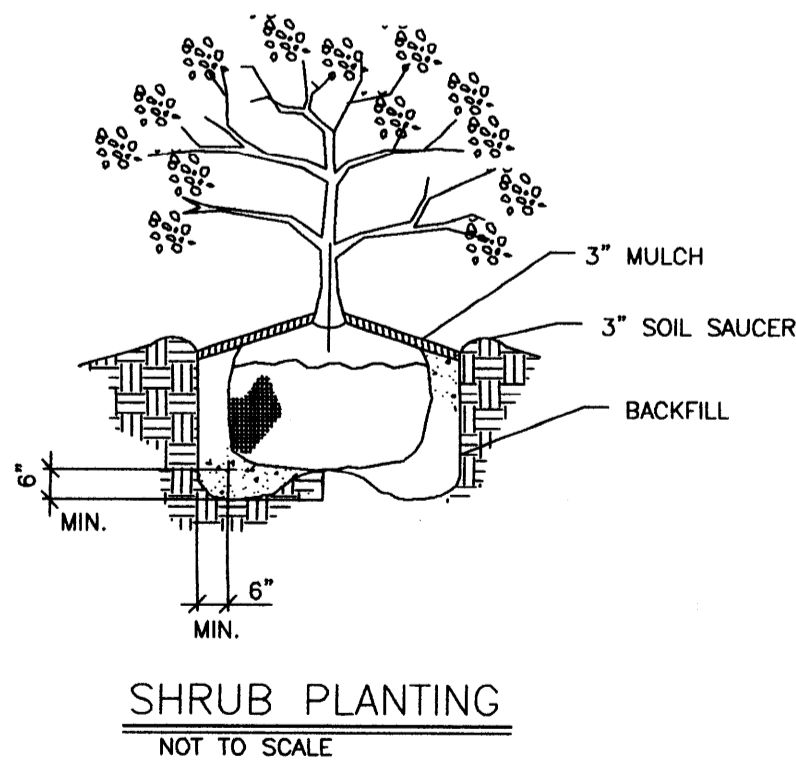
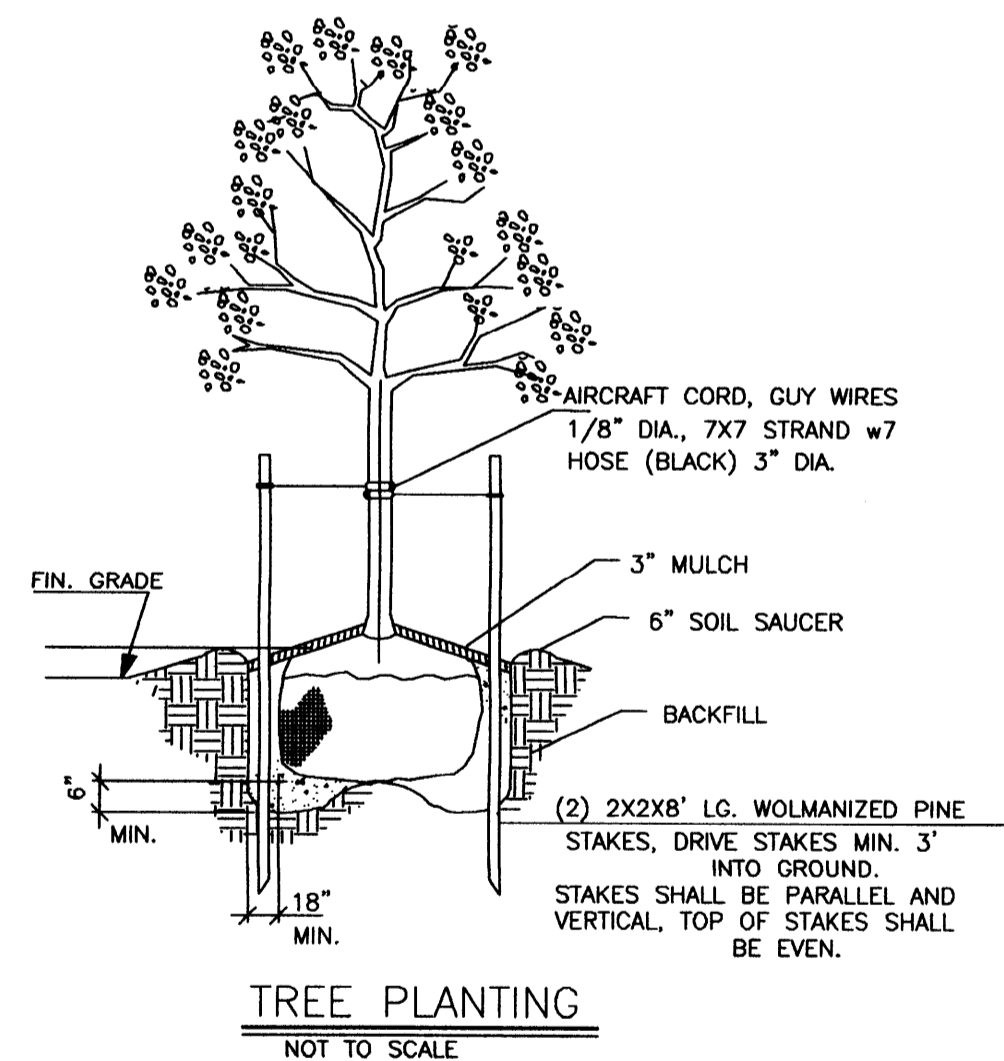
FILE:

DRAWING



PAVING SQUARE FOOTAGE	
1. BUILDING PAVING:	SQUARE FEET = 9,600 SQ. FT.
2. PARKING LOT PAVING:	SQUARE FEET = 14,660 SQ. FT.
3. TOTAL PAVING:	SQUARE FEET = 24,260 SQ. FT.

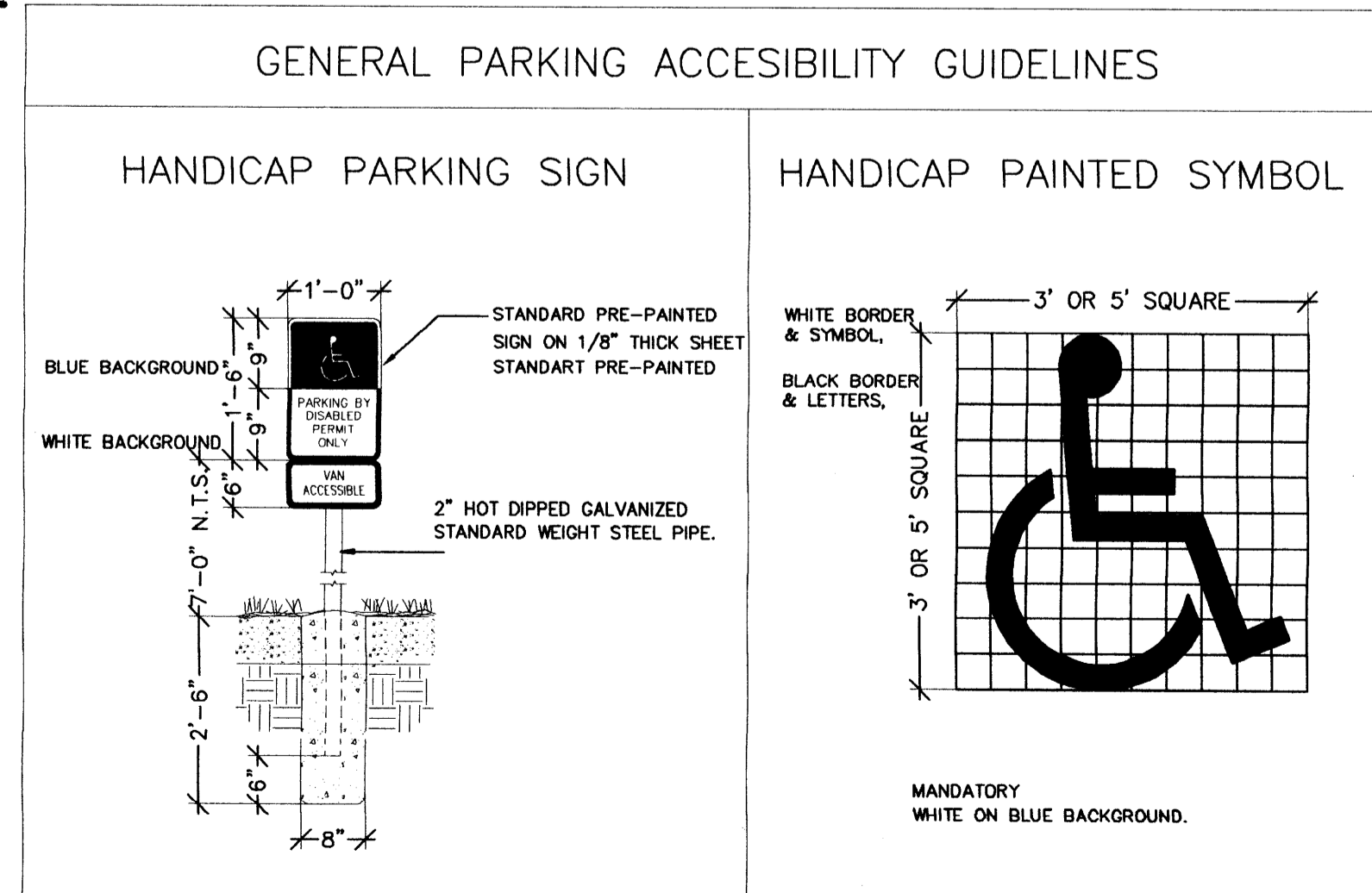
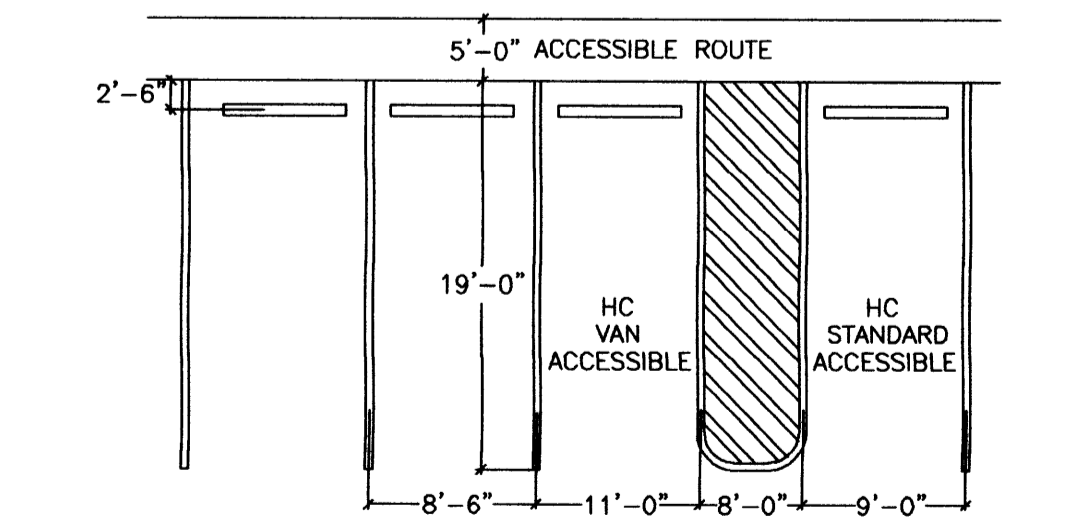
CITY OF HOUSTON DEPARTMENT OF PLANNING AND DEVELOPMENT PARKING LOT ANALYSIS	
1. OFFICE (B)	SQUARE FEET = 1,080 SQ. FT.
NUMBER OF PARKING SPACES REQUIRED @ OFFICE: OFFICE (1,080/1000) * 2.5 = 3	
2. STORAGE/WAREHOUSE (S-1)	SQUARE FEET = 8,520 SQ. FT.
NUMBER OF PARKING SPACES REQUIRED @ STO/WAREHOUSE: STO/WAREHOUSE (8,520/7000) * 1 = 2	
3. TOTAL NUMBER OF PARKING SPACES REQUIRED:	5
TOTAL NUMBER OF PARKING SPACES PROVIDED:	11



PLANT SCHEDULE					
KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	REMARKS
8		ULMUS CRASSIFOLIA	(STREET TREES) CEDAR ELM	3" CAL.	STRAIGHT SINGLE TRUNK FULL SYMMETRICAL HEAD 50'-70' HT. X 40'-60' SPREAD
1		FRAXINUS PENNSYLVANICA	(PARKING LOT TREES) GREEN ASH	3" CAL.	STRAIGHT SINGLE TRUNK FULL SYMMETRICAL HEAD 60' HT. X 45'-50' SPREAD
80		LEUCOPHYLLUM FRUTESCENS	(SHRUBS) TEXAS SAGES	3 GAL.	18" MIN. HEIGHT AND 18" WIDTH

- LANDSCAPE ANALYSIS
- A. STREET TREES:
LENGTH OF PROPERTY LINE IN LINEAL FEET AS MEASURED ALONG ALL SIDES OF THE PROPERTY FRONTING ON A MAJOR THOROUGHFARE STREET(S): 240.0' LINEAL FEET/30 = 8 STREET TREES REQUIRED. (STAFF MAY CREATE AN ARTIFICIAL LOT)
- B. PARKING LOT TREES:
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- C. TOTAL TREE REQUIREMENT:
A + B = 9 TOTAL NUMBER OF STREET AND PARKING LOT TREES REQUIRED.
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PA 1503458
APPROVED
TRAFFIC DESIGN
BY TDT DATE 2/15/2015

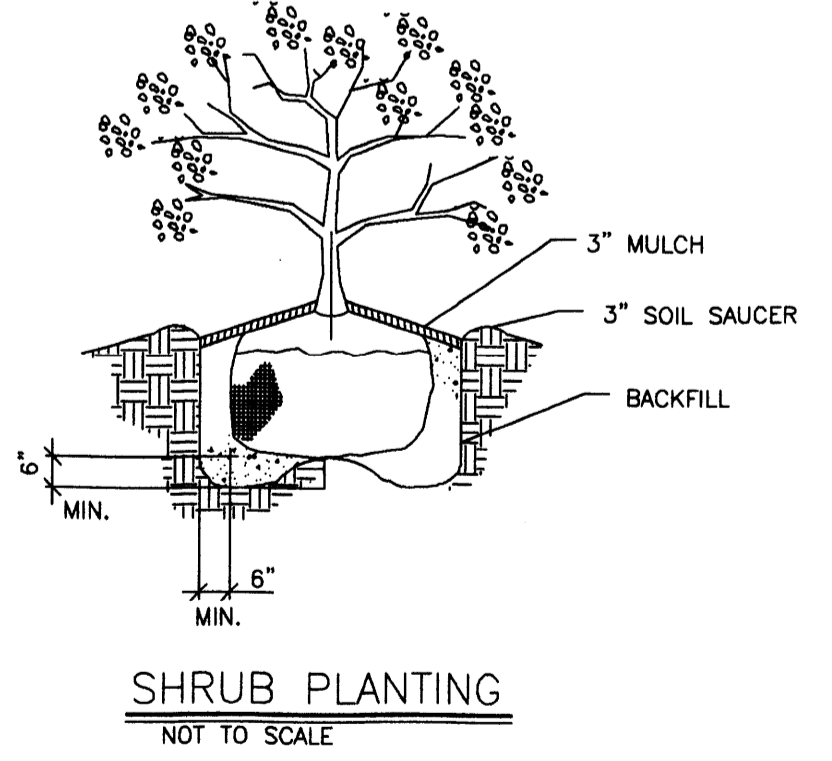
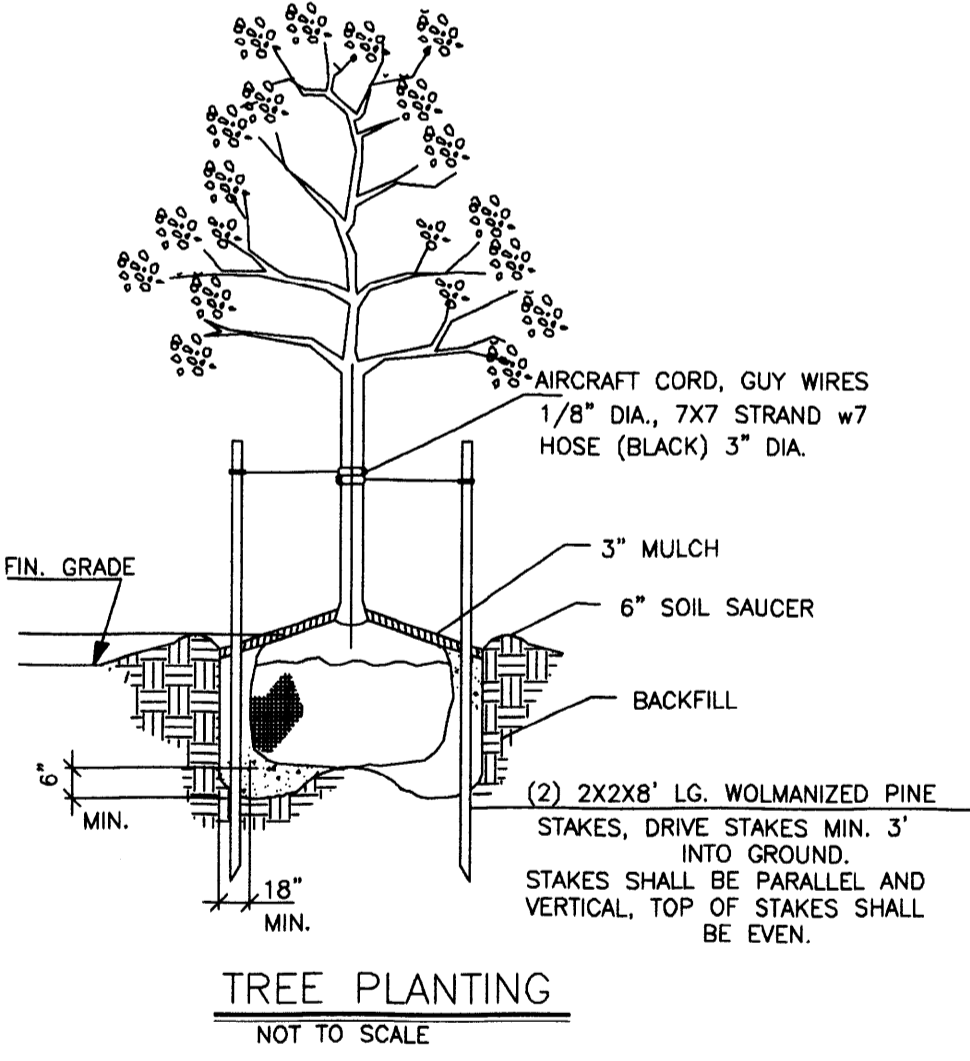
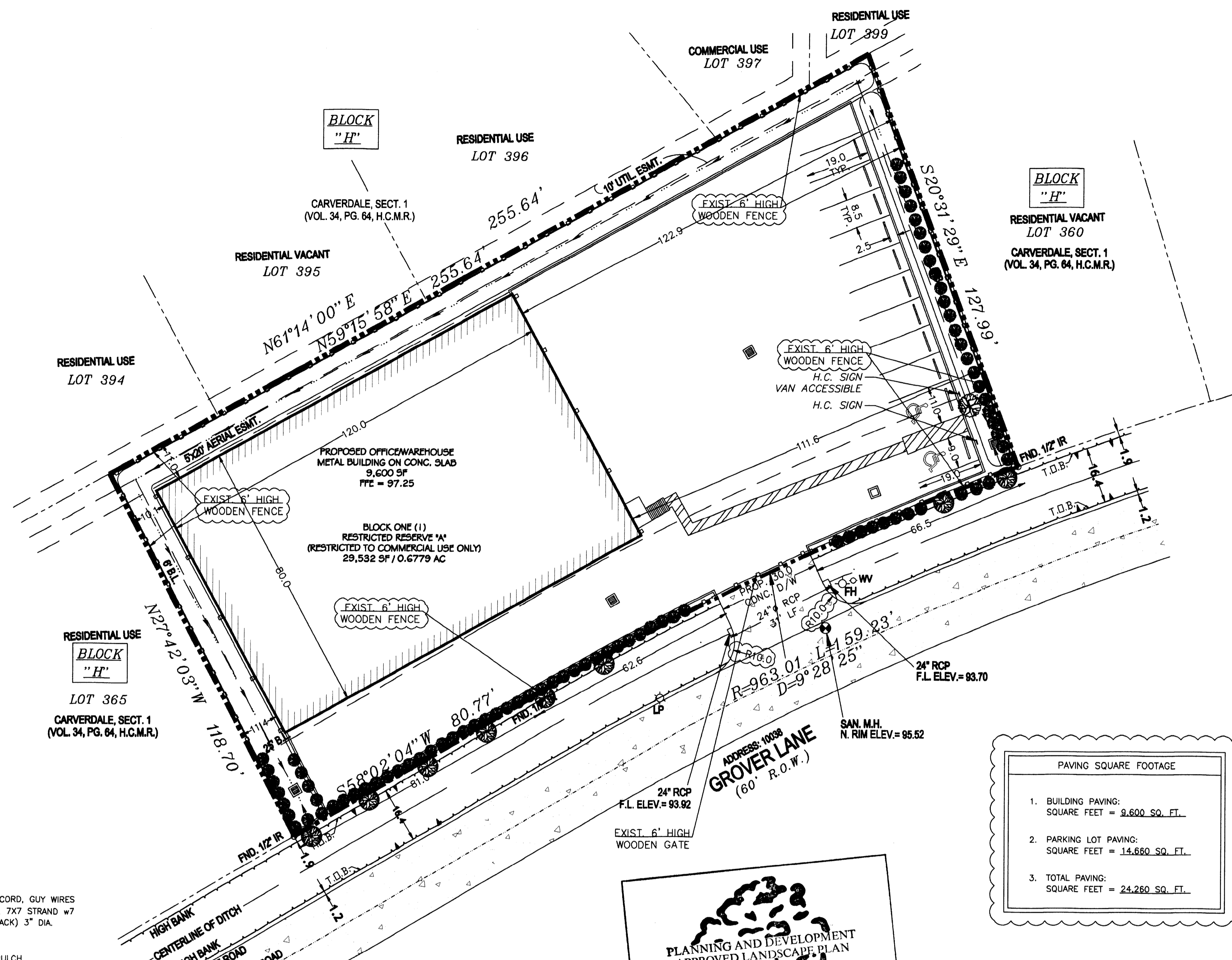
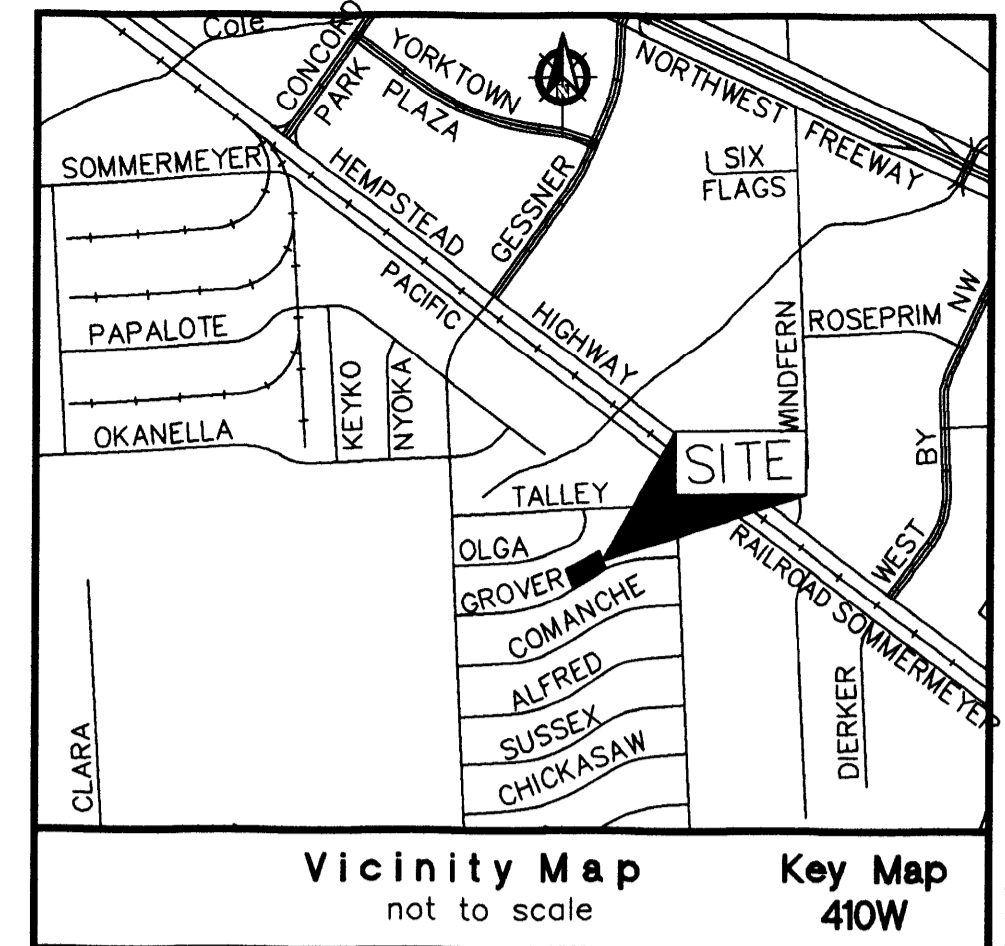


SITE PLAN

1:20

01

C1.0

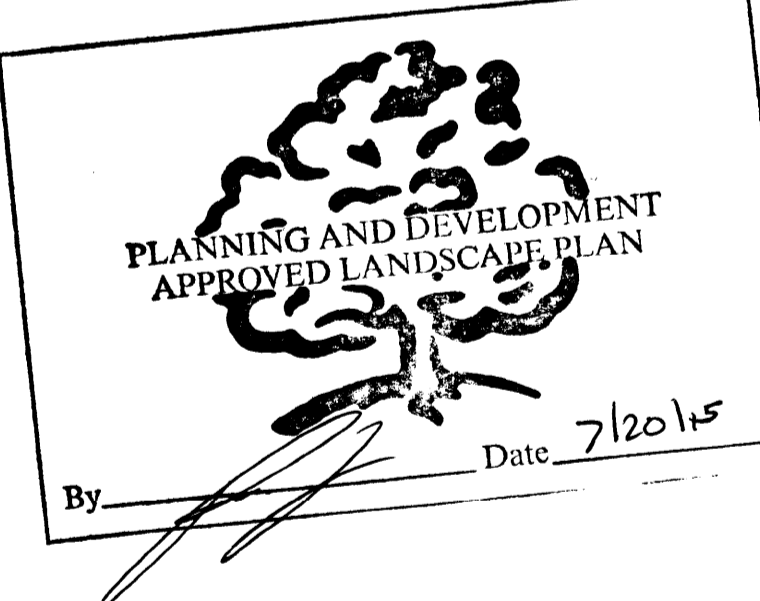


PAVING SQUARE FOOTAGE

- BUILDING PAVING: SQUARE FEET = 9,600 SQ. FT.
- PARKING LOT PAVING: SQUARE FEET = 14,660 SQ. FT.
- TOTAL PAVING: SQUARE FEET = 24,260 SQ. FT.

CITY OF HOUSTON DEPARTMENT OF PLANNING AND DEVELOPMENT
PARKING LOT ANALYSIS

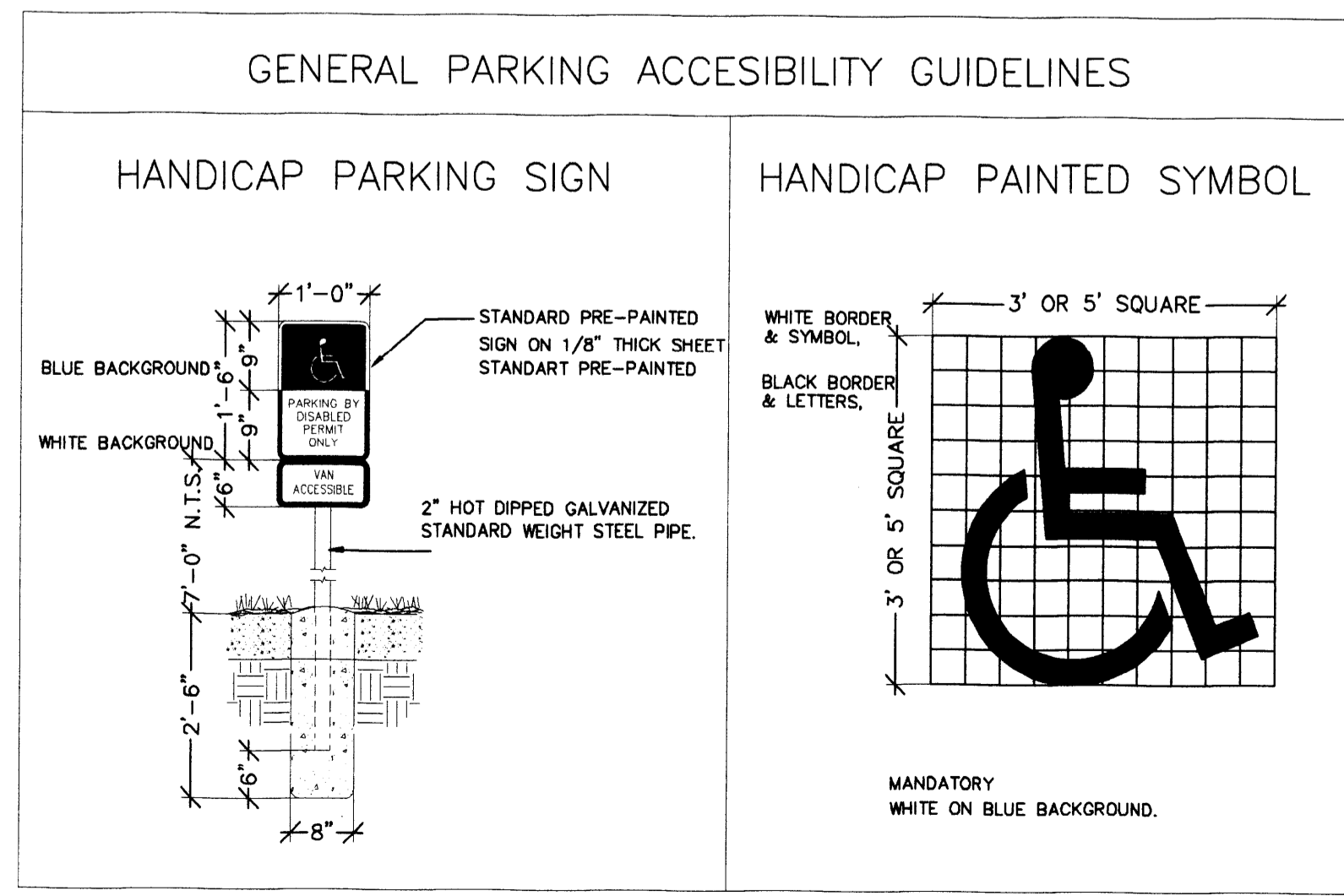
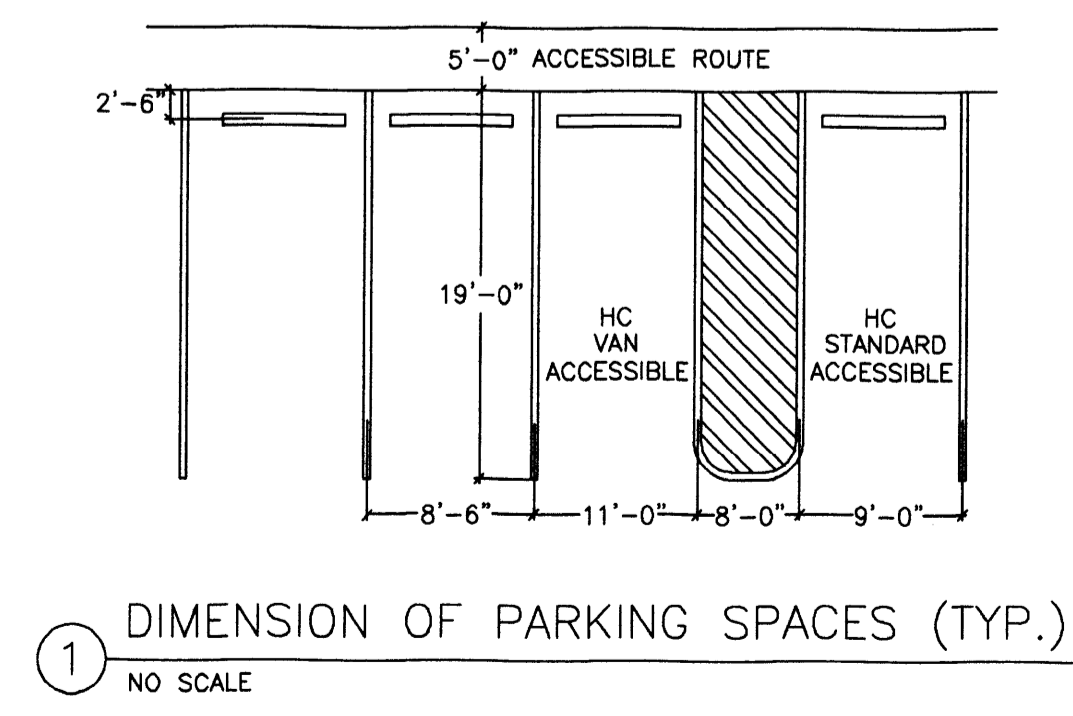
- OFFICE (B)
SQUARE FEET = 1,080 SQ. FT.
NUMBER OF PARKING SPACES REQUIRED @ OFFICE:
OFFICE (1,080/1000) * 2.5 = 3
- STORAGE/WAREHOUSE (S-1)
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- TOTAL NUMBER OF PARKING SPACES REQUIRED: 5
TOTAL NUMBER OF PARKING SPACES PROVIDED: 11



RECOMMENDED APPROVAL
PLANNING AND DEVELOPMENT DEPARTMENT
DEVELOPMENT SERVICES
BY: [Signature] DATE: 7/20/15
LANDSCAPING REQUIRED

- LANDSCAPE ANALYSIS
- STREET TREES:
LENGTH OF PROPERTY LINE IN LINEAL FEET AS MEASURED ALONG ALL SIDES OF THE PROPERTY FRONTING ON A MAJOR THOROUGHFARE STREET(S): 240.0' LINEAL FEET/30 = 8 STREET TREES REQUIRED.
(STAFF MAY CREATE AN ARTIFICIAL LOT)
 - PARKING LOT TREES:
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 - TOTAL TREE REQUIREMENT:
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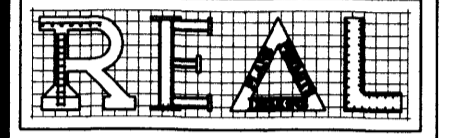
KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	REMARKS
	8	ULMUS CRASSIFOLIA	(STREET TREES) CEDAR ELM	3" CAL.	STRAIGHT SINGLE TRUNK FULL SYMMETRICAL HEAD 50-70' HT. X 40-60' SPREAD
	1	FRAXINUS PENNSYLVANICA	(PARKING LOT TREES) GREEN ASH	3" CAL.	STRAIGHT SINGLE TRUNK FULL SYMMETRICAL HEAD 60' HT. X 45-50' SPREAD
	80	LEUCOPHYLLUM FRUTESCENS	(SHRUBS) TEXAS SAGES	3 GAL.	18" MIN. HEIGHT AND 18" WIDTH



REVISIONS

No.	DATE	DESCRIPTION
1		
2		

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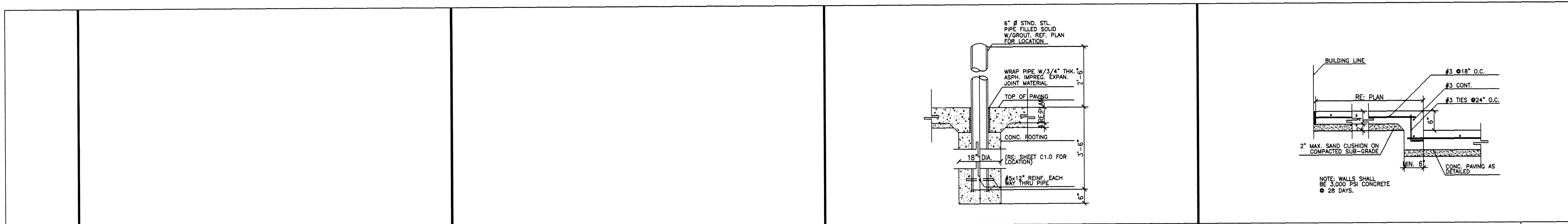
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Ph: 281-888-6747
real_designs@live.com
www.real-designs-inc.com

OWNER: TRUCK SALES

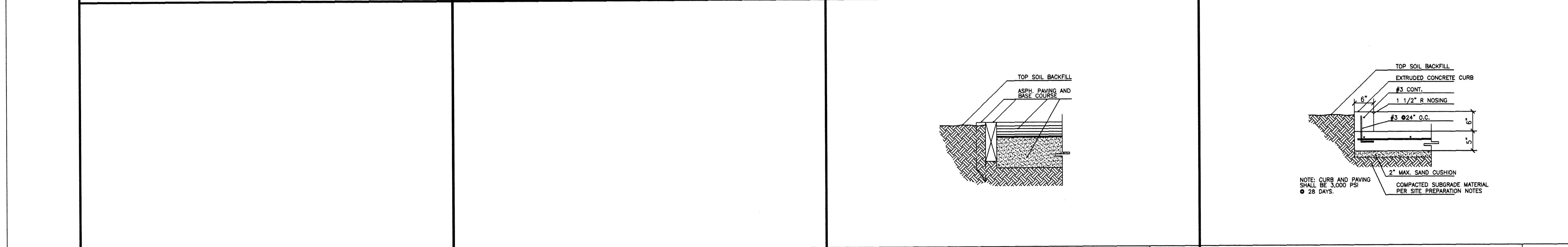
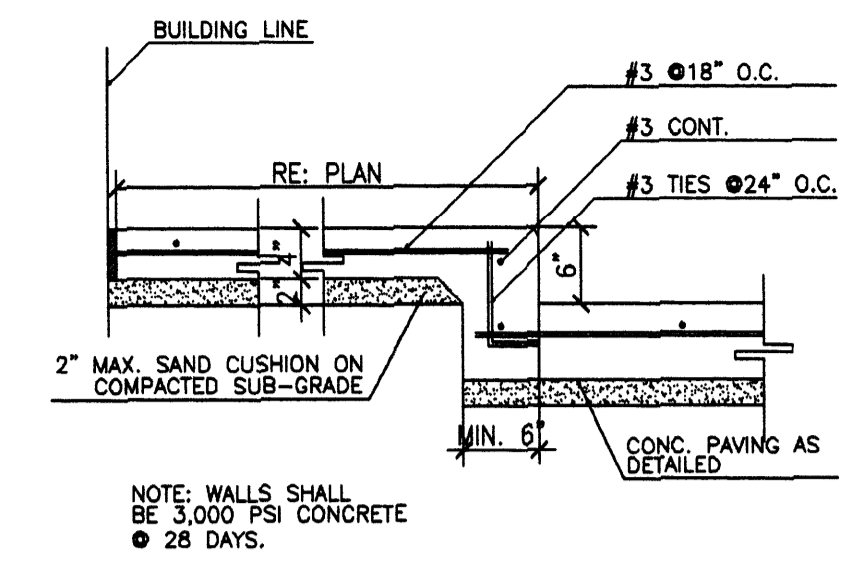
PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE: SITE PLAN

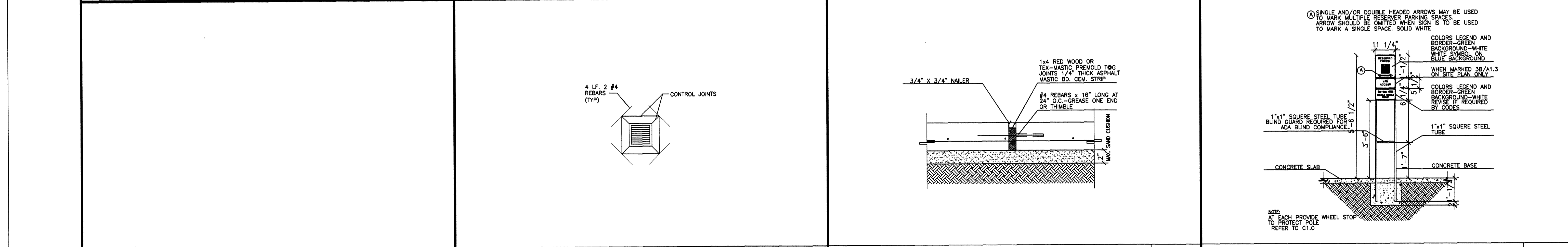
DATE: 12-03-14
DESIGN: 8530
DRAWN: 8530
SCALE: 1:20
JOB No: 14093033
FILE:
DRAWING



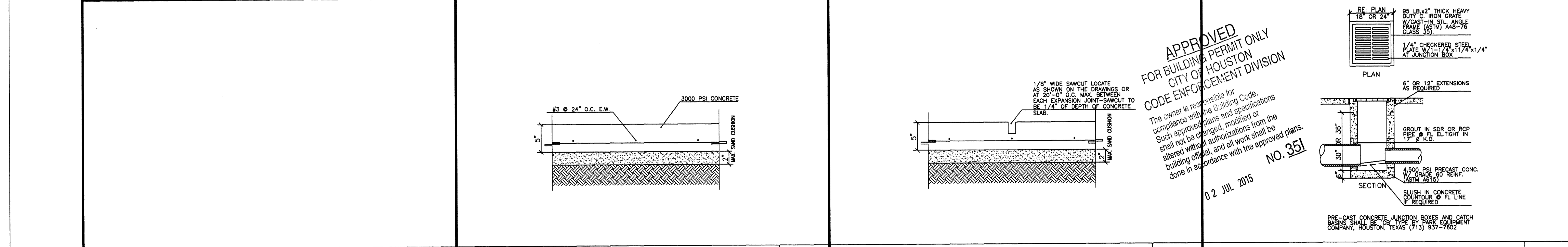
16	12	PIPE BOLLARD	NO SCALE	08	CONCRETE CURB DETAIL	NO SCALE	04
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15	11	PAVING EDGE DETAIL	NO SCALE	07	CURB/ PAVING DETAIL	NO SCALE	03
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14	10	REINFORCEMENT AND CONTROL JOINT DETAIL	NO SCALE	06	HANDICAP PARKING SIGN	NO SCALE	02
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13	09	CONCRETE PAVING DETAIL	NO SCALE	05	J-BOX/ CATCH BASIN	NO SCALE	01
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REVISIONS		DESCRIPTION
No.	DATE	
1		
2		

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real_designs@live.com
www.real-designs-inc.com

OWNER: **TRUCK SALES**

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE: **PAVING DETAILS**

DATE: 12-03-14

DESIGN: 8530

DRAWN: 8530

SCALE: NO SCALE

JOB No: 14093033

FILE:

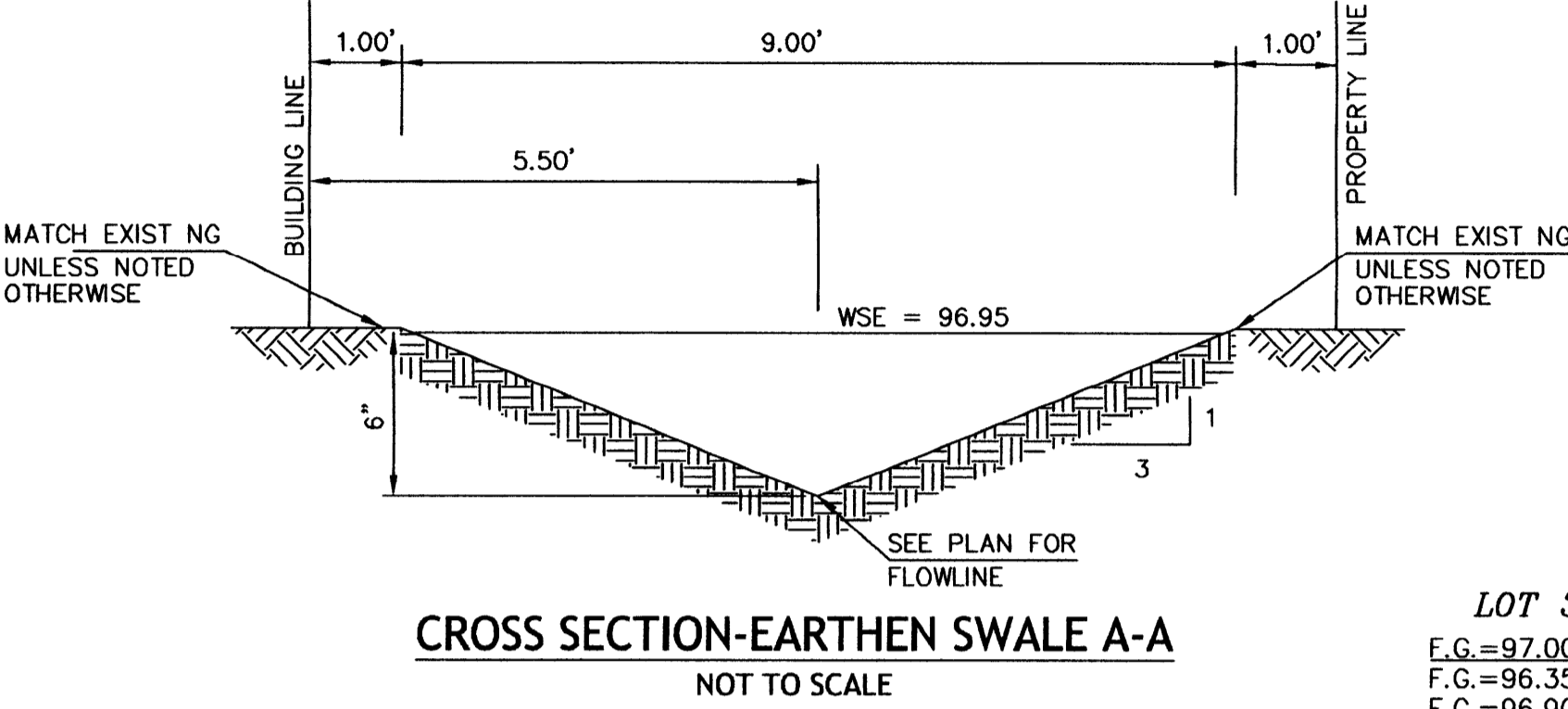
DRAWING: **C1.1**

FLOOD INFO:
 THIS TRACT OR LOT IS NOT IN THE 100 YEAR FLOOD PLAIN AND IS IN ZONE X AS LOCATED BY FEDERAL INSURANCE ADMINISTRATION DESIGNATED FLOOD HAZARD AREA BY MAP NO. 48201C, PANEL NO. 06.35 M, DATED JUNE-09-2014.

THIS INFORMATION IS BASED ON GRAPHIC PLOTTING. WE DO NOT ASSUME RESPONSIBILITY FOR EXACT DETERMINATION.

BENCHMARK: F.L.V. 96.85'
 FLOODPLAIN REFERENCE MARK NUMBER 050240 IS A BRASS DISK STAMPED 050240 AT SW CORNER OF INTERSECTION OF S. BOUND GESSNER RD. AND GENARD ST., LOCATED ON B-B INLET ON SOUTH SIDE OF GENARD ST. IN KEYMAP 450A IN THE WHITE OAK WATERSHED NEAR STREAM E115-00-00 ELEV. 96.85 FEET NAVD 1988, 2001 ADJUSTED.

PROPERTY DESCRIPTION:
 (29,532 SF/0.6779 AC) BLOCK ONE(1) RESTRICTED RESERVE "A" RESTRICTED TO COMMERCIAL USE ONLY OF HOSSEINI ESTATES SUBDIVISION



GRADING NOTES

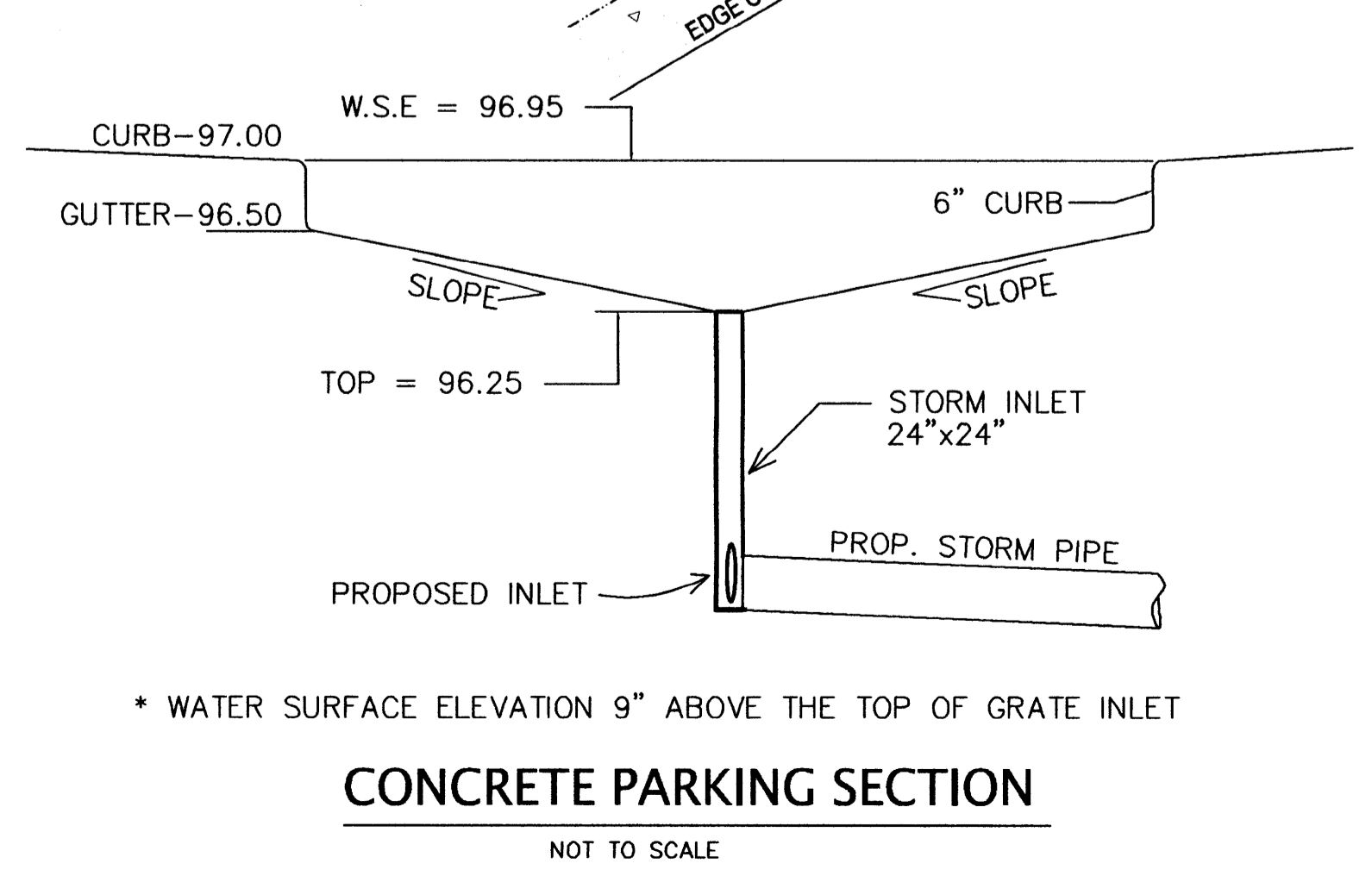
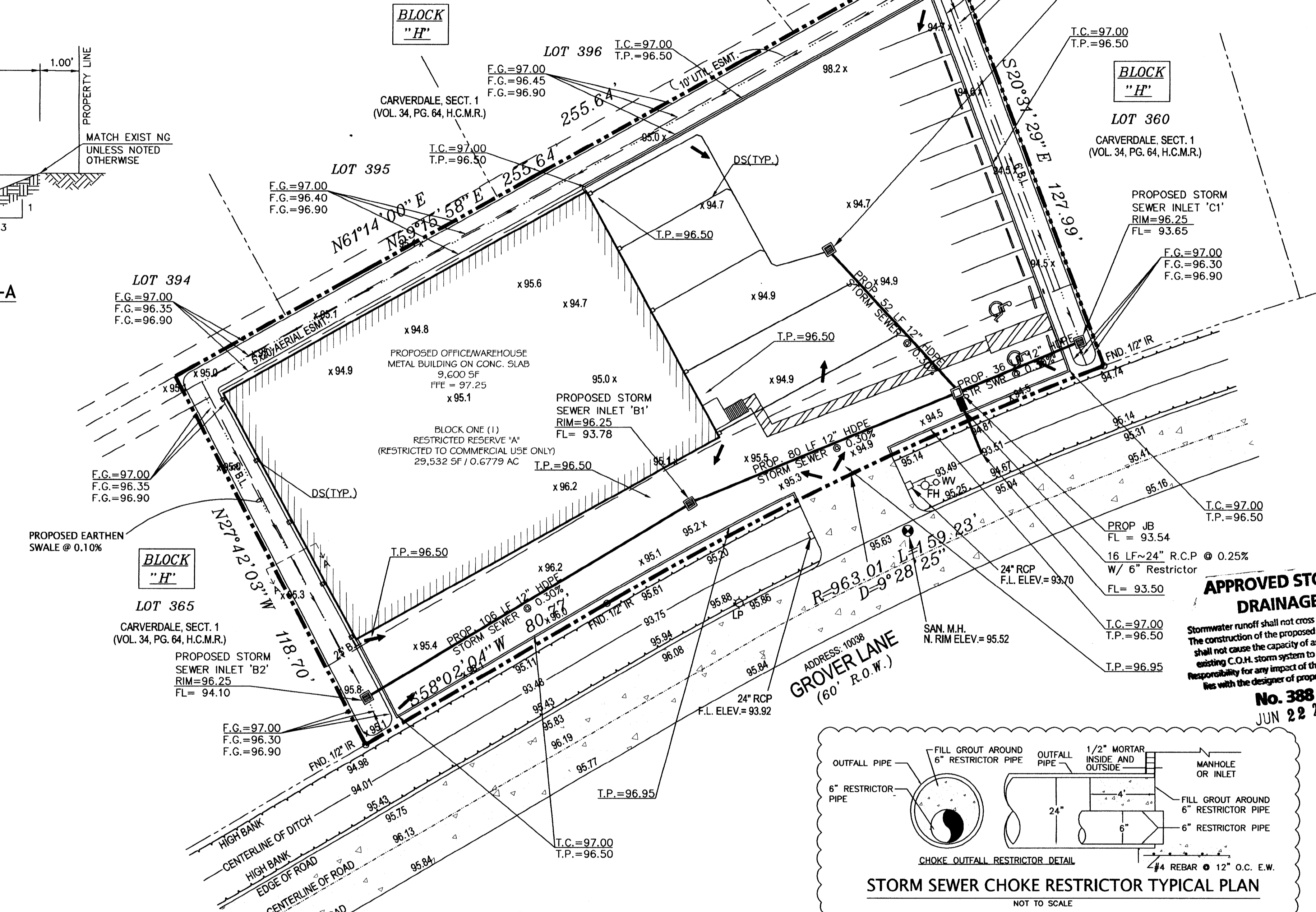
- STRIP AND REMOVE ALL SURFACE ORGANIC, TOPSOIL AND UNSUITABLE MATERIALS FROM ALL BUILDING AND PAVING AREAS. TREE STUMPS INCLUDING THE ROOT SYSTEM SHOULD BE REMOVED.
- ESTABLISH POSITIVE SITE DRAINAGE. INSTALL STORM DRAINAGE STRUCTURES IF REQUIRED.
- PROOF ROLL THE SUBGRADE TO DETECT ANY WET, SOFT, OR PUMPING AREAS, TREAT THESE AREAS WITH DRYING OR STABILIZING AGENTS AS NECESSARY OR REMOVE AND REPLACE THEM WITH A SUITABLE FILL MATERIAL.
- COMPACT THE SUBGRADE TO A MINIMUM OF NINETY FIVE (95) PERCENT OF ITS MAX. DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 698)
- ADDITIONAL FILL MATERIAL WITHIN THE BUILDING AREA SHOULD BE A SILTY OR SANDY CLAY HAVING A PLASTICITY INDEX (PI) OF TEN (10) TO TWENTY (20) AND A LIQUID LIMIT OF 28 OR MORE. FILL MATERIALS SHOULD BE PLACED IN SIX (6) TO EIGHT (8) INCH LOOSE LIFTS AND COMPACTED AT OPTIMUM MOISTURE CONTENT TO NINETY-FIVE (95) PERCENT OF THEIR MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST.

GENERAL NOTES:

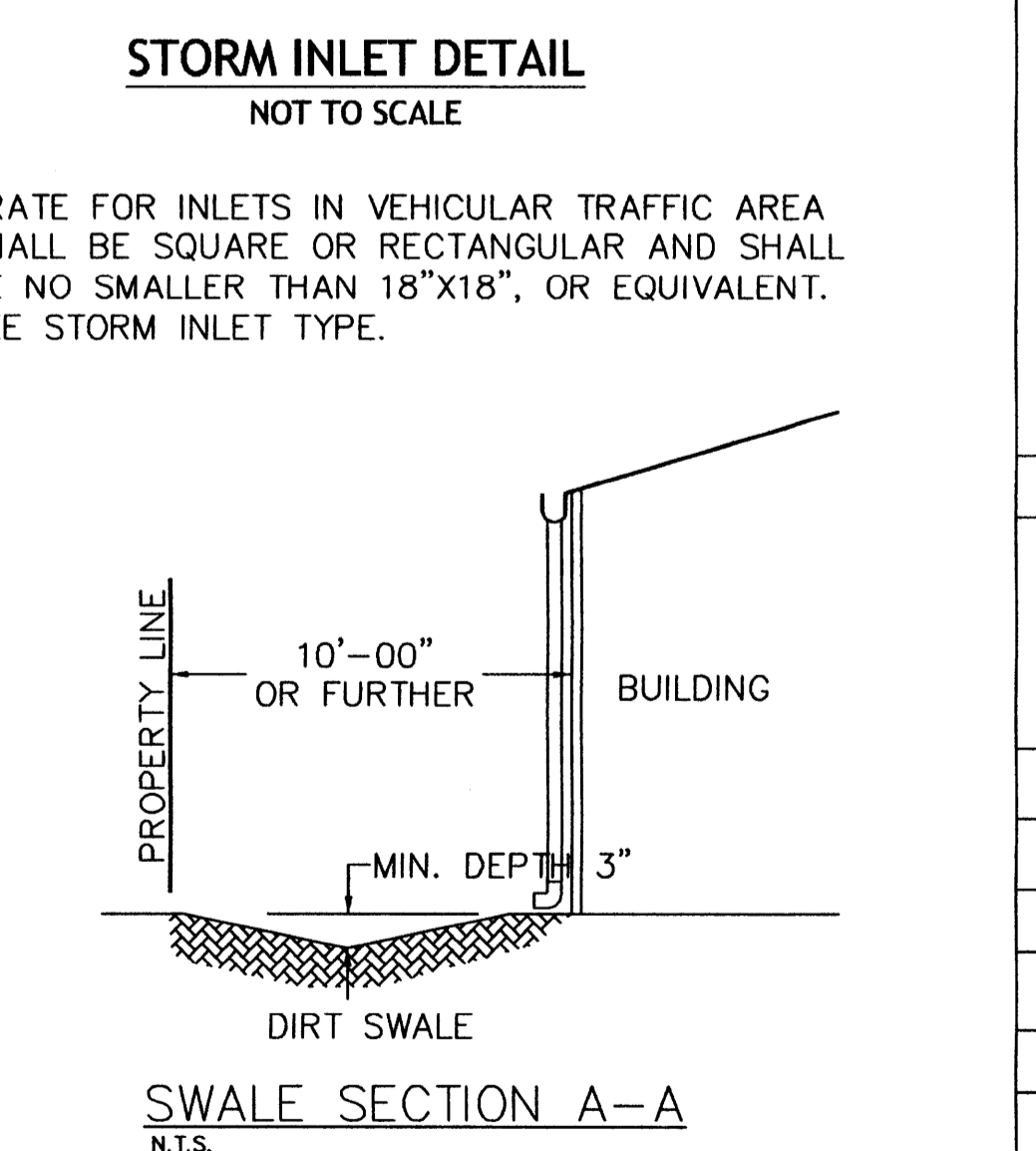
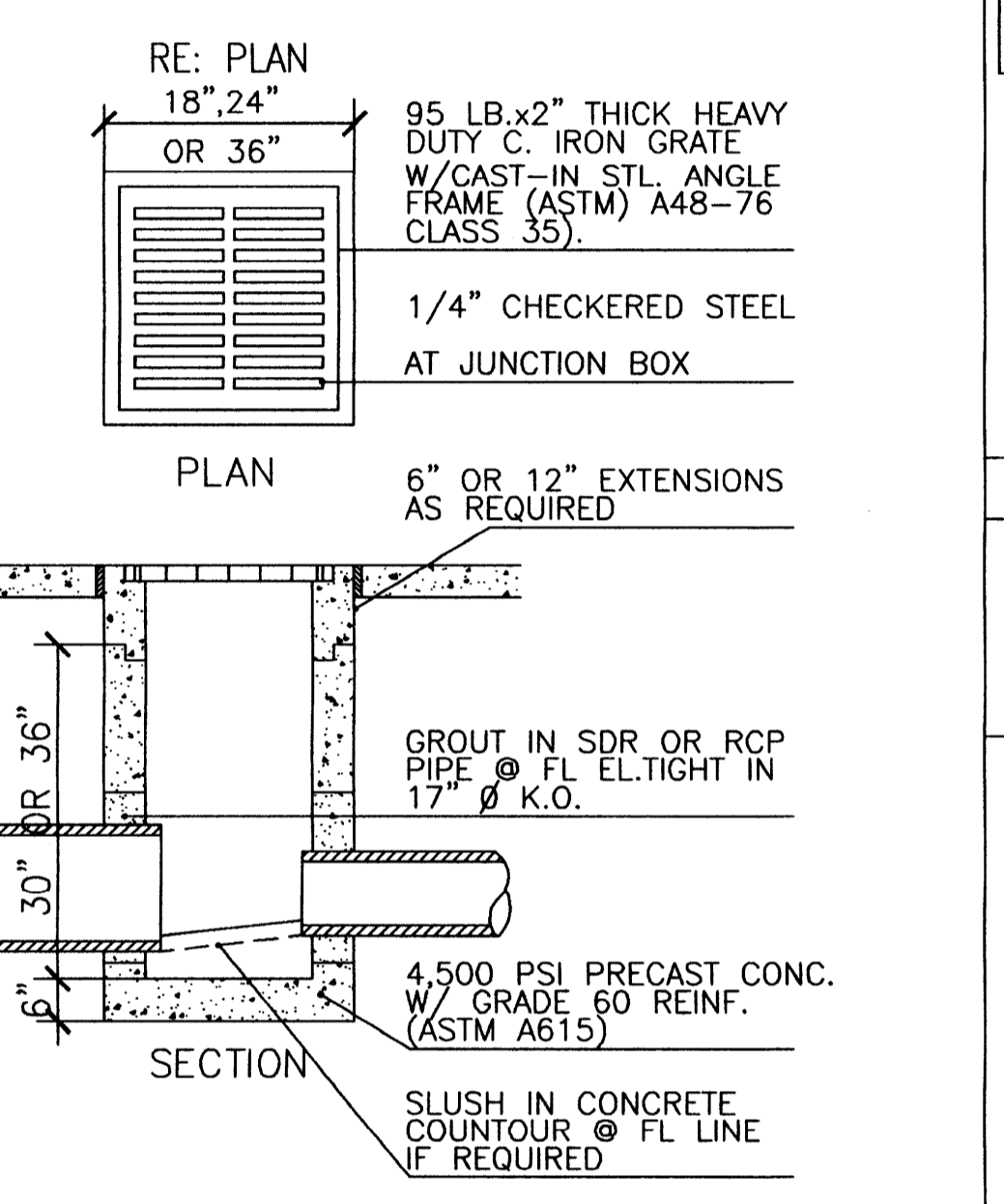
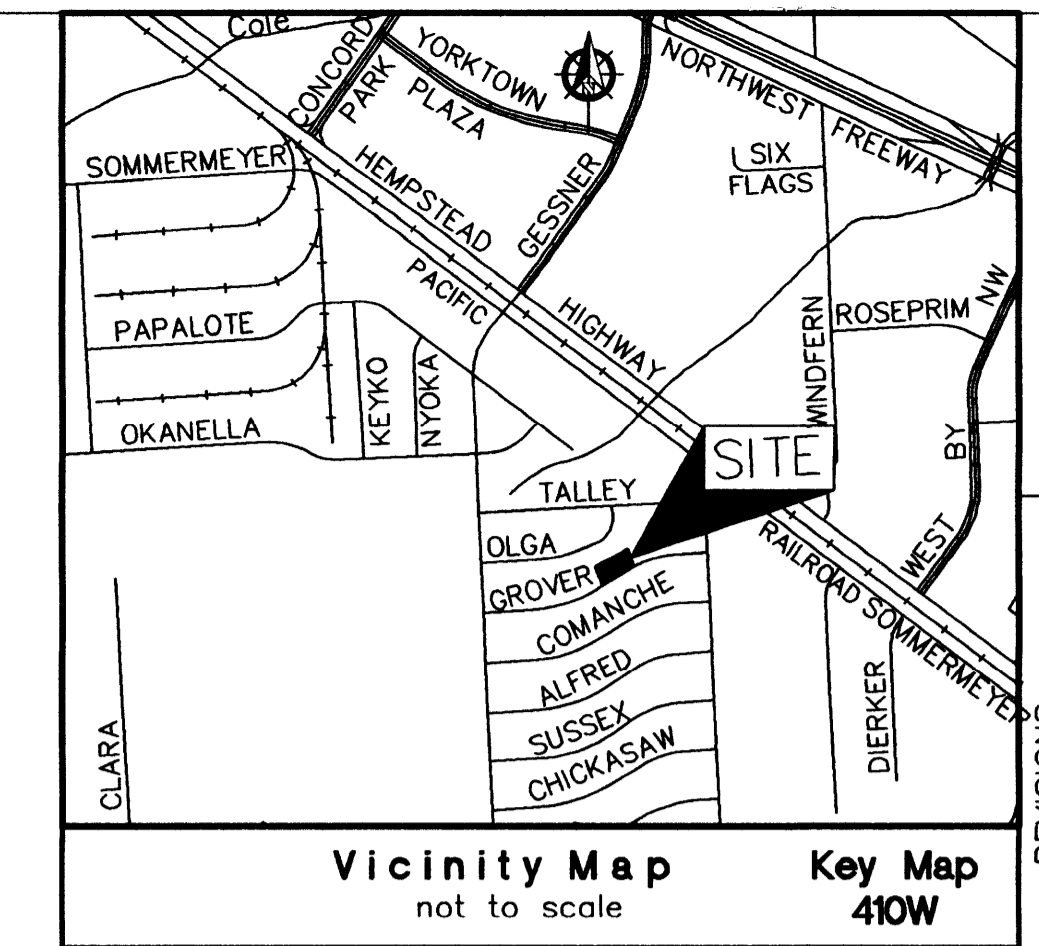
- EXISTING UTILITIES ARE SHOWN ON THE PLAN IN A GENERAL MANNER, FROM INFORMATION SUPPLIED BY SURVEYOR, EXISTING PLANS, AND/OR INFORMATION PROVIDED BY UTILITY COMPANIES. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND WILL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICT.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THE PLANS AND SHALL NOT CONTINUE WITH THAT PORTION OF THE CONSTRUCTION UNTIL THE DISCREPANCY IS RESOLVED.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY REGULATION OF HARRIS COUNTY AND/OR CITY OF HOUSTON, TEXAS FOR FLOOD PLAIN MANAGEMENT PRIOR TO CONSTRUCTION.
- THE OWNER SHALL OBTAIN ALL PERMITS REQUIRED BY THE CITY OF HOUSTON PRIOR TO STARTING CONSTRUCTION.
- SURVEY INFORMATION FOR THIS PROJECT SUPPLIED BY HAWKLAND SURVEYING (713) 922-3354.

GRADING & DRAINAGE PLAN

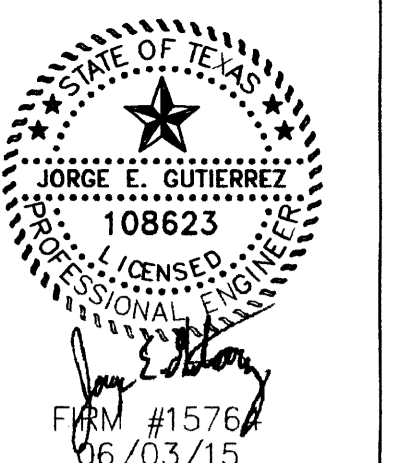
- ALL EXCAVATED TOP-SOIL SHALL BE REMOVED FROM THE SITE OR, IF DESIGNED, SPREAD ALONG THE PROPERTY AND COMPACTED. UNDER NO CIRCUMSTANCES SHALL THE EXCAVATED DIRT STORED AS A PILE ON-SITE FOR EXTENDED PERIOD SO AS TO INTERRUPT THE NATURAL DRAINAGE COURSE AND AFFECT THE NEIGHBORING PROPERTIES.
- SIDE YARDS WILL BE FINELY GRADED IN ORDER TO CREATE A SWALE BETWEEN THE PROPERTY BOUNDARY & BUILDING TO CONVEY RUNOFF AWAY FROM THE FOUNDATION.
- UNDER NO CIRCUMSTANCES THE CONTRACTOR SHALL ALTER THE CONVEYANCE CAPACITY OF AN OFF-SITE DRAINAGE THROUGH THE PROPERTY DURING THE DEVELOPMENT. IF ANY SUCH CONDITIONS ARE NOT LISTED ON THE DRAWINGS BUT EXIST ON-SITE THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER-OF-RECORD BEFORE COMMENCING THE WORK ON-SITE.
- CONTRACTOR SHALL VERIFY THE ON-SITE ELEVATIONS BEFORE THE CONSTRUCTION & SHALL PERFORM AN AS-BUILT SURVEY AFTER THE WORK IS COMPLETED FOR ACCEPTANCE.



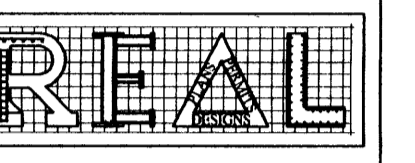
DETENTION SUMMARY	
DETENTION STORAGE REQUIRED:	
1. TOTAL TRACT AREA	= 0.6779 AC
2. AREA OF EXISTING IMPERVIOUS COVER	= 0.0 AC
3. AREA OF INCREASED IMPERVIOUS COVER	= 0.5579 AC
4. DETENTION STORAGE RATE	= 0.20 AC-FT/AC
5. DETENTION STORAGE VOLUME REQUIRED	= 0.1115 AC-FT
TOTAL PARKING/PAVING AREA STORAGE VOLUME:	
PARKING/PAVING STORAGE DEPTH	= 0.75 FT
DRAINAGE AREAS WITH 6" CURBS =	0.583 X 12303 S.F. = 7173 C.F.
SWALES =	0.50 X 3746 S.F. = 1873 C.F.
PARKING/PAVING AREA STORAGE VOLUME (C.F.)	9046 C.F.
TOTAL COMBINED DETENTION STORAGE VOLUME PROVIDED (AC-FT)	= 0.2077 AC-FT
MAXIMUM PARKING DESIGN WATER SURFACE ELEVATION	= 96.95 FT



BUILDINGS WITH ADEQUATE GUTTERS AND DOWNPOUTS, DISCHARGING ROOF WATER 10'-00" OR FURTHER FROM PROPERTY LINE OF ADJOINING PROPERTY MAY USE DIRT SWALE, DITCH OF GRADED SURFACE TO DRAIN ROOF DISCHARGE TO PUBLIC STORM DRAINAGE SYSTEM. OVER 7'-00" AND LESS THAN 10'-00" MAY USE ASPHALT OR CONCRETE SWALE. BUILDINGS CLOSER THAN 7'-00" MAY USE CONCRETE SWALE IF 6" CURB IS PROVIDED AT PROPERTY LINE. BUILDINGS DISCHARGING ROOF WATER WITHIN 10'-00" OF PROPERTY LINE MAY PROVIDE INTERNAL DRAINAGE PIPING TO STORM SEWER IN LIEU OF SWALE AND/OR 6" CURB.



REVISIONS	DATE	DESCRIPTION
1		
2		



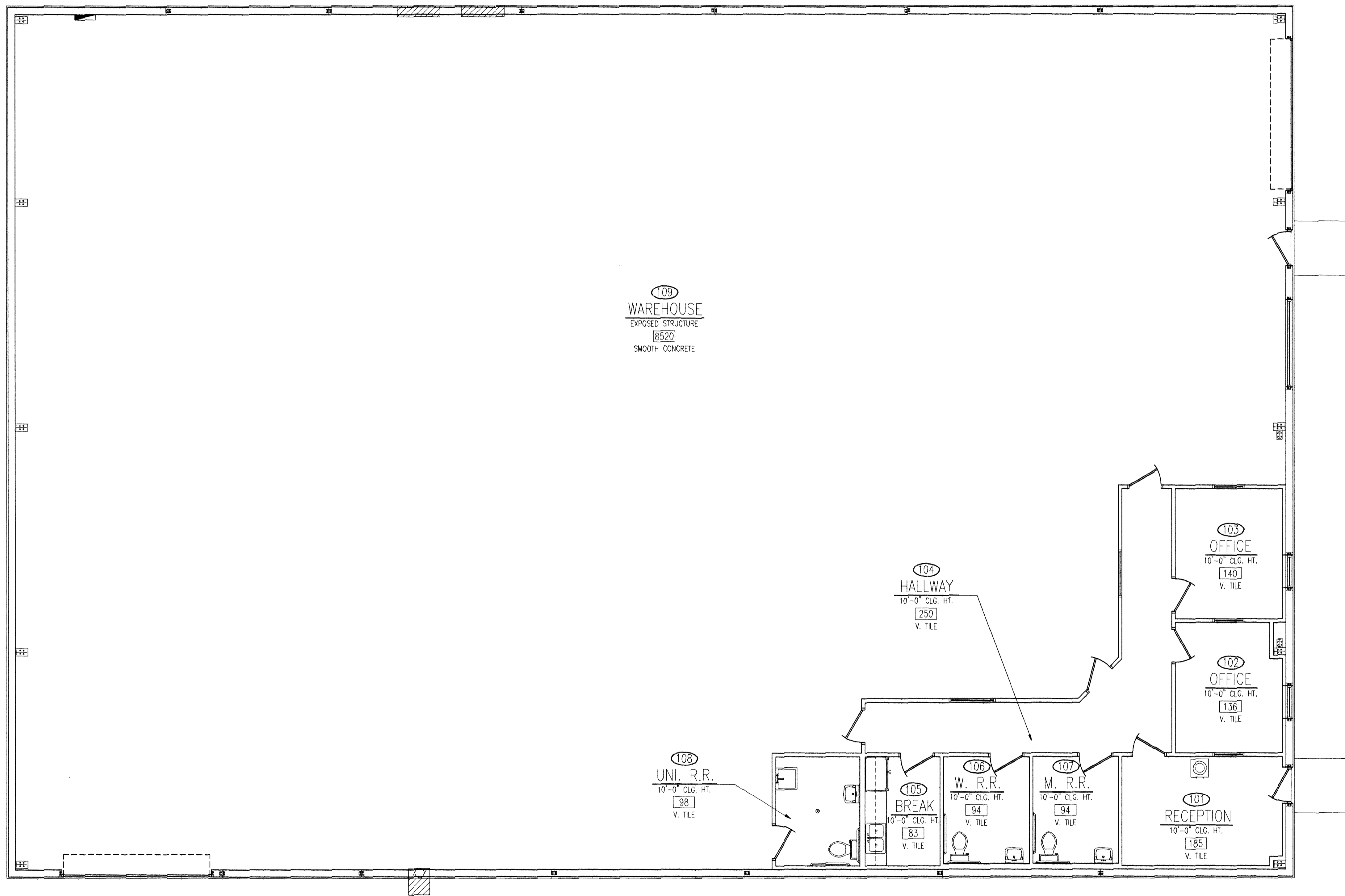
P.O. BOX 23398
 Houston Texas 77228
 Ph: 832-654-7862
 real_designs@live.com
 www.real-designs-inc.com

OWNER: TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE: SITE DRAINAGE PLAN

DATE:	12-03-14
DESIGN:	8530
DRAWN:	8530
SCALE:	1:20
JOB No:	14093033
FILE:	
DRAWING	C1.2



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02 JUL 2015 NO. 351

109
 WAREHOUSE
 EXPOSED STRUCTURE
 8520
 SMOOTH CONCRETE

104
 HALLWAY
 10'-0" CLG. HT.
 250
 V. TILE

103
 OFFICE
 10'-0" CLG. HT.
 140
 V. TILE

102
 OFFICE
 10'-0" CLG. HT.
 136
 V. TILE

108
 UNI. R.R.
 10'-0" CLG. HT.
 98
 V. TILE

105
 BREAK
 10'-0" CLG. HT.
 83
 V. TILE

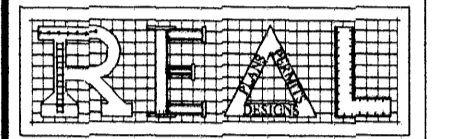
106
 W. R.R.
 10'-0" CLG. HT.
 94
 V. TILE

107
 M. R.R.
 10'-0" CLG. HT.
 94
 V. TILE

101
 RECEPTION
 10'-0" CLG. HT.
 185
 V. TILE

NO.	DATE	DESCRIPTION
1		
2		

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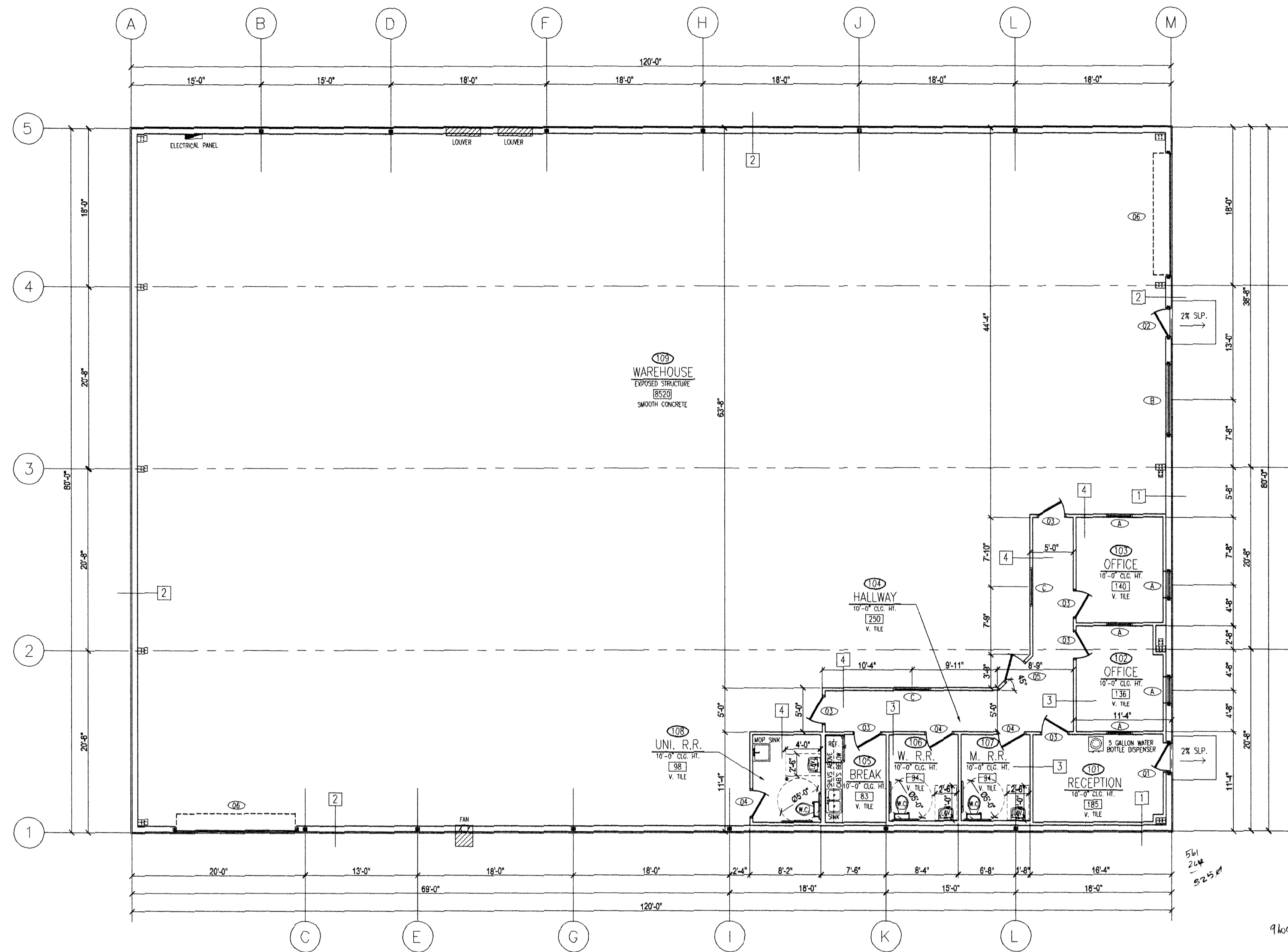


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OWNER:
TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:	FLOOR PLAN
DATE:	12-03-14
DESIGN:	8613
DRAWN:	8613
SCALE:	3/16" = 1'-0"
JOB No:	14093033
FILE:	
DRAWING	

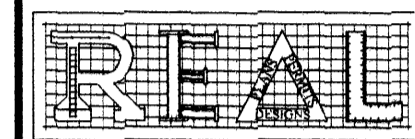


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02 JUL 2015 NO. 351

REVISIONS	NO.	DATE	DESCRIPTION
	1		
	2		



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OWNER:

TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:

FLOOR PLAN

FLOOR PLAN- DIMENSION

1/8"= 1'-0"

03

- HAZARDOUS MATERIALS:**
THIS BUILDING WILL NOT BE USED FOR THE STORAGE AND / OR USE OF HAZARDOUS MATERIALS IN EXCESS OF EXEMPT AMOUNTS LISTED IN THE HOUSTON FIRE CODE.
- HIGH-PILED COMBUSTIBLE STORAGE:**
THIS BUILDING WILL NOT BE USED FOR HIGH-PILED STORAGE.
- STATEMENT OF STORING MATERIAL:**
PROPOSED SHOP AREA, TO BE DESIGNATED FOR NON-HAZARDOUS MATERIAL. STORAGE MATERIAL SHALL CONSIST ON OF STEEL OBJECTS AND METAL PIPES LAY-DOWN WITHIN THE STORAGE ZONE. NO EQUIPMENT, MACHINERY OR STORAGE RACK WILL BE USED.

- REFER TO COVER SHEET FOR CODE ANALYSIS.
- OCCUPANT LOADS ARE REQUIRED TO BE POSTED IN A CONSPICUOUS PLACE NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY ON AN APPROVED SIGN.
- REFER TO SHEET A1.3 FOR WALL SECTIONS.
- DOOR SIGN: "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED."
- THE MANUFACTURER OF THE PRE-FAB METAL BUILDING SHALL BE FROM AN APPROVED FABRICATOR BY THE CITY OF HOUSTON AND THE PRE-FAB METAL BUILDING SHALL MEET 110 MPH, 3 SECOND GUST WIND REQ'S.

GENERAL NOTES

NO SCALE

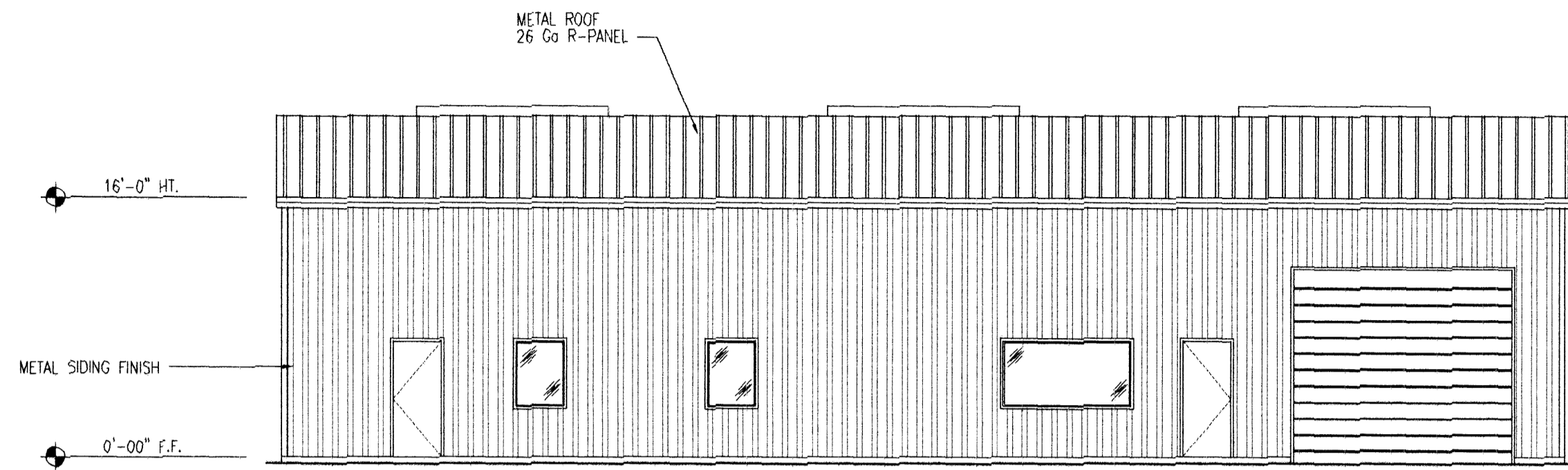
02

KEYED NOTES

NO SCALE

01

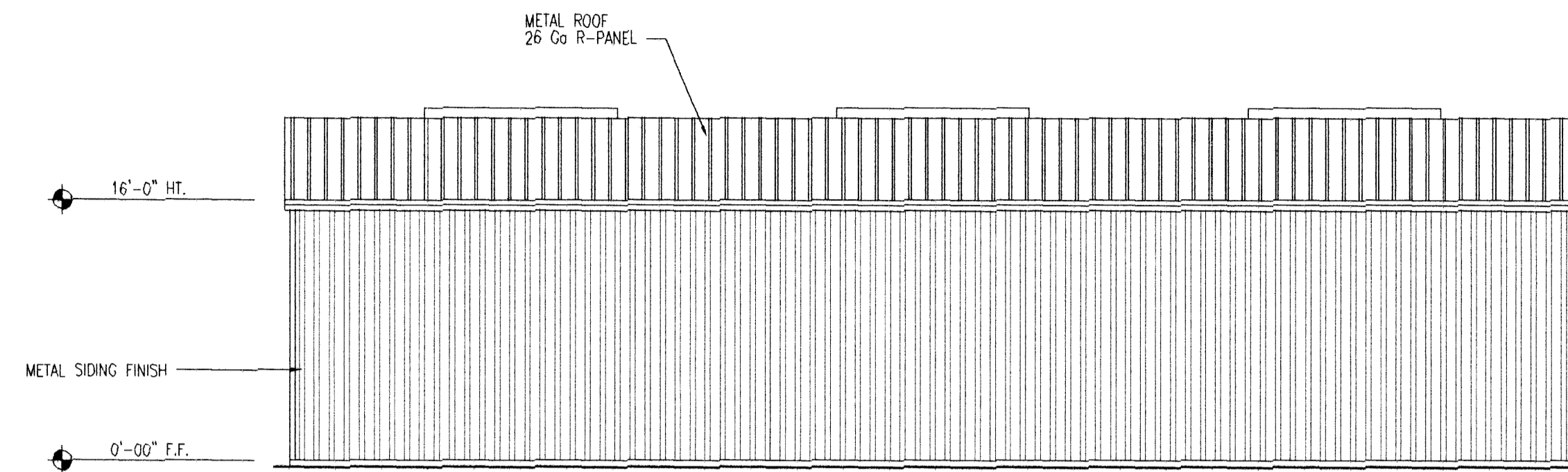
A1.1



FRONT ELEVATION

1/8"= 1'-0"

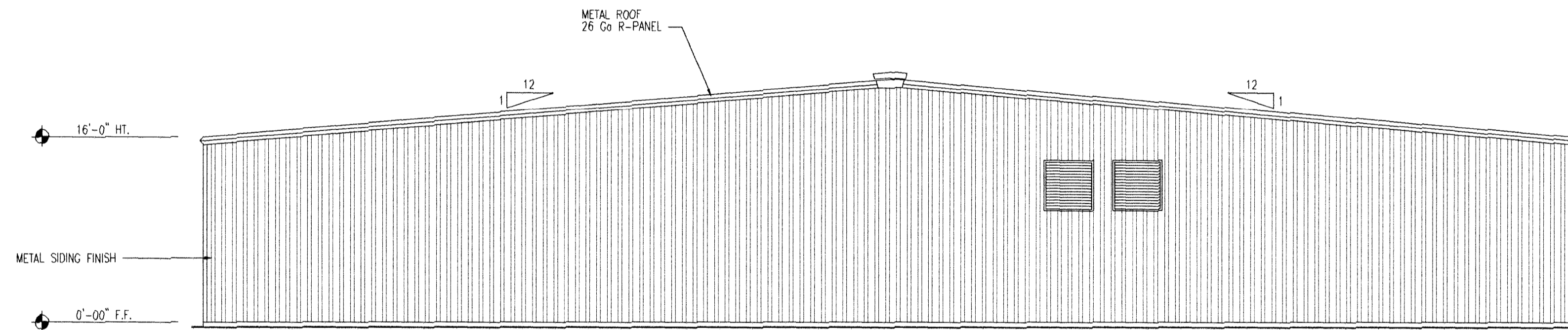
04



REAR ELEVATION

1/8"= 1'-0"

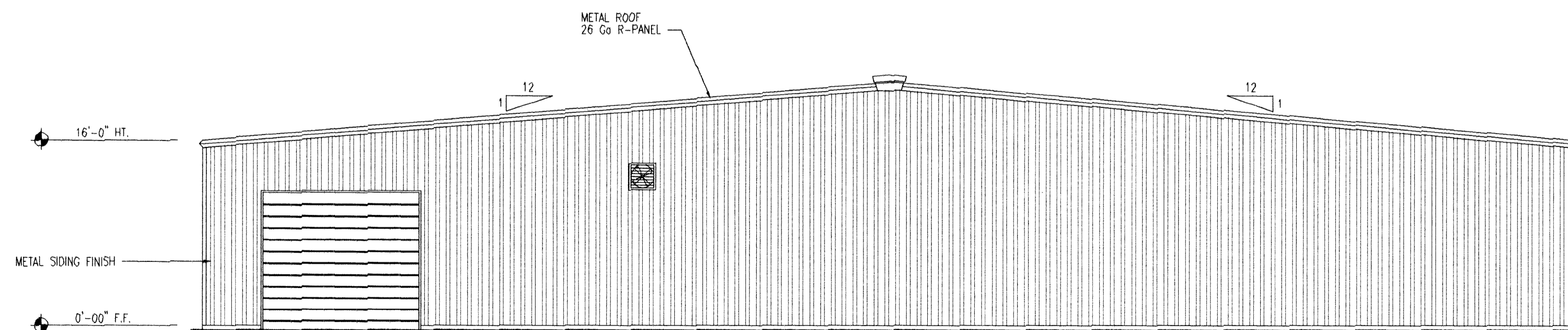
03



RIGHT ELEVATION

1/8"= 1'-0"

02



LEFT ELEVATION

1/8"= 1'-0"

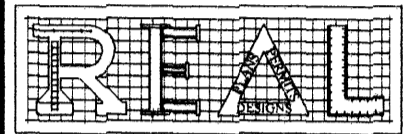
01

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REVISIONS	No.	DATE	DESCRIPTION
	1		
	2		



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OWNER:

**TRUCK
SALES**

**PROPOSED
METAL BUILDING
FOR OFFICE WAREHOUSE
LOCATED AT
10038 GROVER LANE
HOUSTON, TEXAS 77041**

DRAWING TITLE:

**EXTERIOR
ELEVATIONS**

DATE:

12-03-14

DESIGN:

8613

DRAWN:

8613

SCALE:

1/8"= 1'-0"

JOB No:

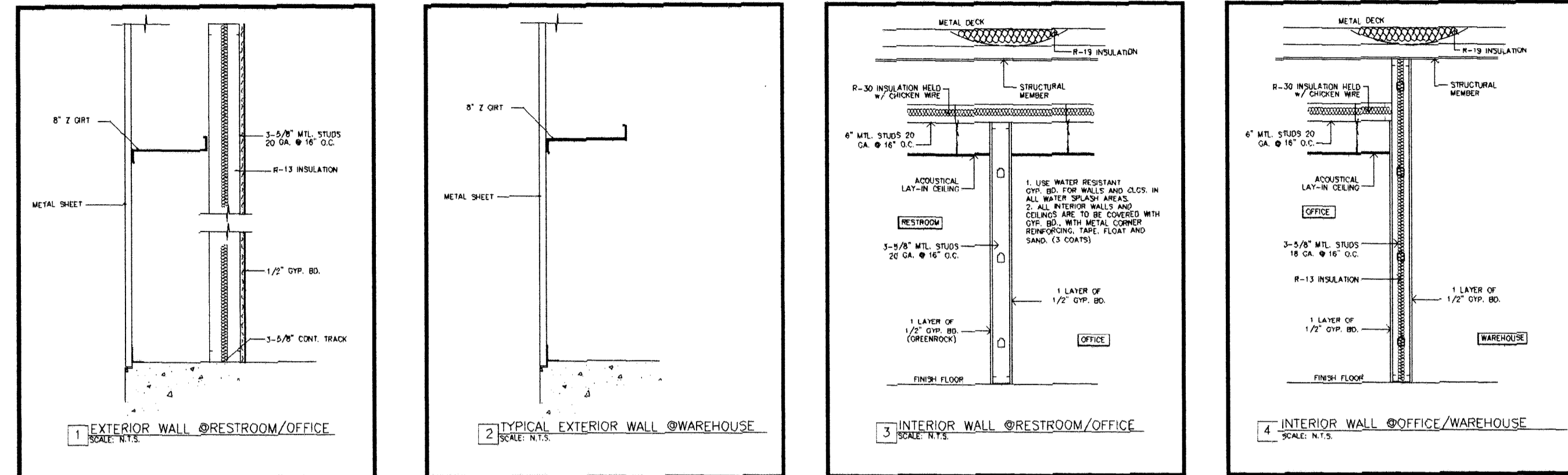
14093033

FILE:

REAL\2014\14093033\10038 GROVER L.NARCH

DRAWING

A1.2



WALL SECTIONS

NO SCALE

02



ROOF PLAN

-NOTE:

NOTE: WHERE THE ROOF HAS A SLOPE OF 1:12, WILL BE A COOL ROOF BY APOC (AP 247) SUN-SHIELD WHITE REFLECTIVE ROOF COATING. REFER TO SPECIFICATION SHEET ATTACHED TO PLANS.

compliance with...
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NO. 351

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02 JUL 2015 **NO. 351**

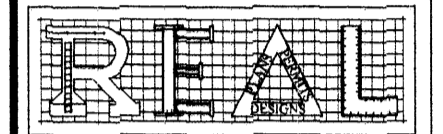
-NOTE:

OWNER/G.C. TO VERIFY EXACT NUMBER OF SKY LIGHTS, VENT LOCATION AND SIZE.

1/8" = 1'-0"

01

NO.	DATE	DESCRIPTION
1		
2		



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OWNER:

TRUCK
SALES

PROPOSED
METAL BUILDING
FOR OFFICE WAREHOUSE
LOCATED AT
10038 GROVER LANE
HOUSTON, TEXAS 77041

DRAWING TITLE:

ROOF
PLAN

DATE:

12-03-14

DESIGN:

8613

DRAWN:

8613

SCALE:

1/8" = 1'-0"

JOB No:

14093033

FILE:

F:\REAL\2014\14093033\10038 GROVER LN\ARCH

DRAWING

A1.3

ROOM FINISH SCHEDULE											
ROOM NUMBER	ROOM NAME	FLOORS	WALLS				BASE	CABINERY	CEILING	CEILING HEIGHT	REMARKS
			NORTH	SOUTH	EAST	WEST					
101	RECEPTION	VINYL TILE	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	6" GRAY RUBBER		ARMSTRONG FINE FISSURED WHITE 24x48 #1732 SUSPENSION SYSTEM PRELUDE 15/16" EXPOSED TEE SYSTEM	10'-0" CLG.	
102,103	OFFICES	VINYL TILE	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	6" GRAY RUBBER		ARMSTRONG FINE FISSURED WHITE 24x48 #1732 SUSPENSION SYSTEM PRELUDE 15/16" EXPOSED TEE SYSTEM	10'-0" CLG.	
104	HALLWAY	VINYL TILE	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED LATEX ACRYLIC ENAMEL PAINT	6" GRAY RUBBER		ARMSTRONG FINE FISSURED WHITE 24x48 #1732 SUSPENSION SYSTEM PRELUDE 15/16" EXPOSED TEE SYSTEM	10'-0" CLG.	
105	BREAKROOM	VINYL TILE	WATER-RESISTANT GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED w/ F.R.P. FINISH 4'-0" A.F.F.	WATER-RESISTANT GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED w/ F.R.P. FINISH 4'-0" A.F.F.	WATER-RESISTANT GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED w/ F.R.P. FINISH 4'-0" A.F.F.	WATER-RESISTANT GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED w/ F.R.P. FINISH 4'-0" A.F.F.	6" GRAY RUBBER		ARMSTRONG FINE FISSURED WHITE 24x48 #1732 SUSPENSION SYSTEM PRELUDE 15/16" EXPOSED TEE SYSTEM	10'-0" CLG.	FLOORS TO BE SMOOTH, HARD, NON-ABSORBENT SURFACES THAT EXTENDS UPWARD ONTO THE WALL UP TO 6 INCHES REFER TO "RESTROOM NOTE."
106-108	RESTROOMS	VINYL TILE	WATER-RESISTANT GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED w/ F.R.P. FINISH 4'-0" A.F.F.	WATER-RESISTANT GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED w/ F.R.P. FINISH 4'-0" A.F.F.	WATER-RESISTANT GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED w/ F.R.P. FINISH 4'-0" A.F.F.	WATER-RESISTANT GYP. BD. 1/2" FLAT TEXTURED FINISH LIGHT TAN COLORED w/ F.R.P. FINISH 4'-0" A.F.F.	6" GRAY RUBBER		ARMSTRONG FINE FISSURED WHITE 24x48 #1732 SUSPENSION SYSTEM PRELUDE 15/16" EXPOSED TEE SYSTEM	10'-0" CLG.	FLOORS TO BE SMOOTH, HARD, NON-ABSORBENT SURFACES THAT EXTENDS UPWARD ONTO THE WALL UP TO 6 INCHES REFER TO "RESTROOM NOTE."
109	WAREHOUSE	SMOOTH CONCRETE FINISH	EXPOSED STRUCTURE	EXPOSED STRUCTURE	EXPOSED STRUCTURE	EXPOSED STRUCTURE	EXPOSED STRUCTURE	EXPOSED STRUCTURE	EXPOSED STRUCTURE	EXPOSED	

AREA & OCCUPANCY SUMMARY			
ROOM NUMBER	ROOM NAME	AREAS	OCCUPANTS
101	RECEPTION	185	2
102,103	OFFICES	276	3
104	HALLWAY	250	0
105	BREAKROOM	83	1
106-108	RESTROOMS	286	0
109	WAREHOUSE	8,520	17
TOTAL NET AREA=		9,600 S.F.	
TOTAL OCCUPANTS=		23 OCCUPANTS	
TOTAL GROSS AREA=		9,600 S.F.	

RESTROOM NOTE:
6-INCH RUBBER BASE IS AN ADHERED FINISH IN FRONT OF 0'-0" TO 4'-0" FRP (FIBER REINFORCED PANEL) ON RESTROOM WALLS - TO COMPLY WITH THE REQUIREMENTS OF SECTION 1210.1.

PAINTING SPECIFICATION
CONTRACTOR SHALL PROVIDE A MINIMUM OF (2) FINISH COATS OF PAINT OVER (1) COAT OF PRIMER. (TYPE OF PAINT USED PER SCHEDULE, THIS SHEET)

- GENERAL FINISH NOTES**
- ALL GYP. BOARD WALLS AND CEILINGS SHALL BE 5/8" TYPE "X" FIRE RESISTANT.
 - USE 5/8" TYPE "X" GREEN BOARD (WATER RESISTANT) AT ALL WET AREAS AND BEHIND ALL WALLS TO BE FINISHED IN CERAMIC TILE.
 - ALL PAINTED AND/OR STAINED BASE AND CROWNS TO BE SOLID WOOD PER TRIM DETAILS AND SPECIFICATIONS. USE ACRYLIC CAULKING AT ALL JOINTS TO BE PAINTED.
 - ALL PAINT COLORS TO BE SELECTED BY ARCHITECT. CONTRACTOR SHALL PROVIDE MINIMUM 12" X 12" PAINTED SAMPLES, ON SAME MATERIAL TO BE PAINTED, FOR REVIEW AND APPROVALS.
 - ALL GYP. BOARD PAINTED SURFACES SHALL RECEIVE ONE COAT ALKOYD PRIMER SEALER AND TWO FINISHED COATS OF LATEX ACRYLIC ENAMEL PAINT, EGGSHELL ROLL ON TEXTURED FINISH.
 - ALL FINISH HARDWARE INCLUDING KNOBS, HINGES, PULLS, DRAWER SLIDES, AND ALL OTHER METAL FINISHED HARDWARE SHALL BE REMOVED FROM THE SURFACES TO BE PAINTED OR STAINED PRIOR TO PAINTING OR STAINING. HARDWARE SHALL THEN BE REINSTALLED AFTER PAINTED OR STAINED SURFACE IS COMPLETELY DRY. NO STAIN OR PAINT SHALL BE ALLOWED ON FINISHED OR FUNCTIONAL HARDWARE.
 - ALL EXTERIOR WOOD SURFACES SHALL RECEIVE ONE COAT ALKOYD PRIMER SEALER AND TWO FINISHED COATS OF EXTERIOR OIL BASE ENAMEL PAINT, SEMI-GLOSS, SMOOTH FINISH.
 - ALL EXTERIOR WOOD JOINTS SHALL BE CONTINUOUSLY CAULKED WITH ACRYLIC CAULKING. FINISHED PAINTING SHALL ONLY BE APPLIED AFTER CAULKING HAS BEEN APPLIED AND IS COMPLETELY DRY.
 - ALL STONE TILES, CERAMIC TILES, WOOD FLOORING, BRICK PAVERS AND ANY OTHER SPECIAL FINISHES SHALL BE SELECTED BY ARCHITECT. CONTRACTOR SHALL SUPPLY ROUGH SAMPLES AND FINISHED SAMPLES AS REQUIRED.
 - ALL PLASTIC LAMINATE FINISHES SHALL BE APPLIED TO SMOOTH PLYWOOD OR SOLID WOOD SURFACES PER MANUFACTURERS SPECIFICATIONS.
 - ALL CULTURED MARBLE AND SOLID SURFACE COUNTER TOPS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS. SEE INTERIOR ELEVATIONS FOR LOCATIONS OF MATERIALS.

WINDOW SCHEDULE										
NUMBER	QTY	MATL	WIDTH	HEIGHT	HDR.	HT.	FR. MATL	FR. FIN	REMARKS	
A	5	ALUM	3'-0"	4'-0"	7'-0"		ALUMINUM	ALUMINUM	SHGC=0.5, U-FACTOR=0.8	
B	1	ALUM	8'-0"	4'-0"	7'-0"		ALUMINUM	ALUMINUM	SHGC=0.5, U-FACTOR=0.8	
C	2	ALUM	4'-0"	4'-0"	7'-0"		ALUMINUM	ALUMINUM	SHGC=0.5, U-FACTOR=0.8	

DOOR HARDWARE SPECIFICATIONS

Item:	Manufacturer:	Approved:	Accepted:
Hinges	Hager	M&K	Stanley
Locks	Best	None	None
Cylinders	Best	None	None
Pulls	Hager	Rockwood	Yes
Closers	LCN	None	None
Exit Devices	Sargent	None	DCI
Flush Bolts	Hager	Rockwood	DCI
Coordina-tors	Hager	Rockwood	Yes
Silencers	Hager	Rockwood	Yes
Kickplates	Hager	Rockwood	Yes
Stops	Hager	Rockwood	Yes
OH Stop	ABH	Rison	Glyn-Johnson
Thresholds	National Guard	Ultra	Permie
Seals/Sweeps	National Guard	Ultra	Permie

MATERIALS:

- A. Locksets: All locksets and latchsets shall be extra-heavy-duty lever cylindrical with Best 7-pin interchangeable core. Lockset and Cores to be of the same manufacturer to maintain complete lockset warranty. Locks to have solid shank with no opening for access to keyed lever keeper. Keyed Lever to be protected by means of a break-away mechanism to prevent forced entry, when excessive force is applied, a replaceable part will shear. Lock chassis must be through-bolted (outside of the lock chassis prep) to prevent rotation of chassis after installation. Lock manufacturer shall provide a three-year warranty, in writing, to the Owner, along with three copies of the lock service manual. Strikes shall be 16 gauge curved brass, bronze or stainless steel with a 1" deep box construction, and have sufficient length to clear trim and protect coating.
- Grade 1 Cylindrical Locks shall have minimum 9/16 throw. All deadbolts shall have 1-inch minimum throw.
 - Comply with requirements of local security ordinances.
 - Lock Series and Design: Best 93K7 15C (Exterior), 73K7 15C (Interior). Cylinders: Best 7-Pin

HARDWARE LOCATIONS:

- Bottom Hinge: 10 inches from door bottom to bottom of hinge.
- Top Hinge: 5 inches from door top to top of hinge.
- Center Hinge: Center between top and bottom hinge.
- Extra Hinge: 6 inches from bottom of top hinge to top of extra hinge.
- Lock: 38 inches from finished floor to center of lever or knob.
- Push Bar: 44 inches from bottom of door to center of bar.
- Flush Plate: 44 inches from bottom of door to center of plate.
- Pull Plate: 42 inches from bottom of door to center of pull.
- Exit Device: 39-13/16 inches from finished floor to center of pad.
- Doorlock Strike: 44 inches from floor, centered.

SCHEDULE OF FINISH HARDWARE

- A. Legend of listed manufacturers:
 HA Hager SA Sargent BE Best
 LC LCN AB ABH NC National Guard
- B. The items listed in the following "Schedule of Finish Hardware" shall conform throughout to the requirements of the foregoing specification. The last column of letters in the Hardware Schedule refers to the manufacturer abbreviation listed above.
- C. The Door Schedule on the Drawings indicates which Hardware Set is used with door.

HW-01	HW-06	HW-11
3 ea Hinge BB1279 4.5 x 4.5 NRP 613 HA 1 ea Exit 8710 613 SA 1 ea Exit 8713-ETL 613 SA 1 ea Cylinder 1274 613 BE 2 ea Closer P1461-H-CUSH 695 LC 2 ea Kick 1905 10 x 1-1/2"LDW 613 HA 3 ea Silencer 3070 HA	6 ea Hinge BB1279 4.5 x 4.5 640 HA 1 ea Push 305 4 x 16 613 HA 1 ea DP Strike 280X 613 HA 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 2 ea Bracket 297M 600 HA 2 ea Kick 1905 10 x 1-1/2"LDW 613 HA 2 ea Astragal 158NDk 313 NG 2 ea Silencer 3070 HA	3 ea Hinge BB1279 4.5 x 4.5 640 HA 1 set AF Bolt 2940 613 HA 1 ea DP Strike 280X 613 HA 1 ea Lockset 93K7R 15C 613 BE 2 ea Closer P1461-H-CUSH 695 LC 1 ea Silencer 3070 HA 2 ea Bracket 297M 600 HA 2 ea Kick 1905 10 x 1-1/2"LDW 613 HA 2 ea Astragal 158NDk 313 NG 2 ea Silencer 3070 HA

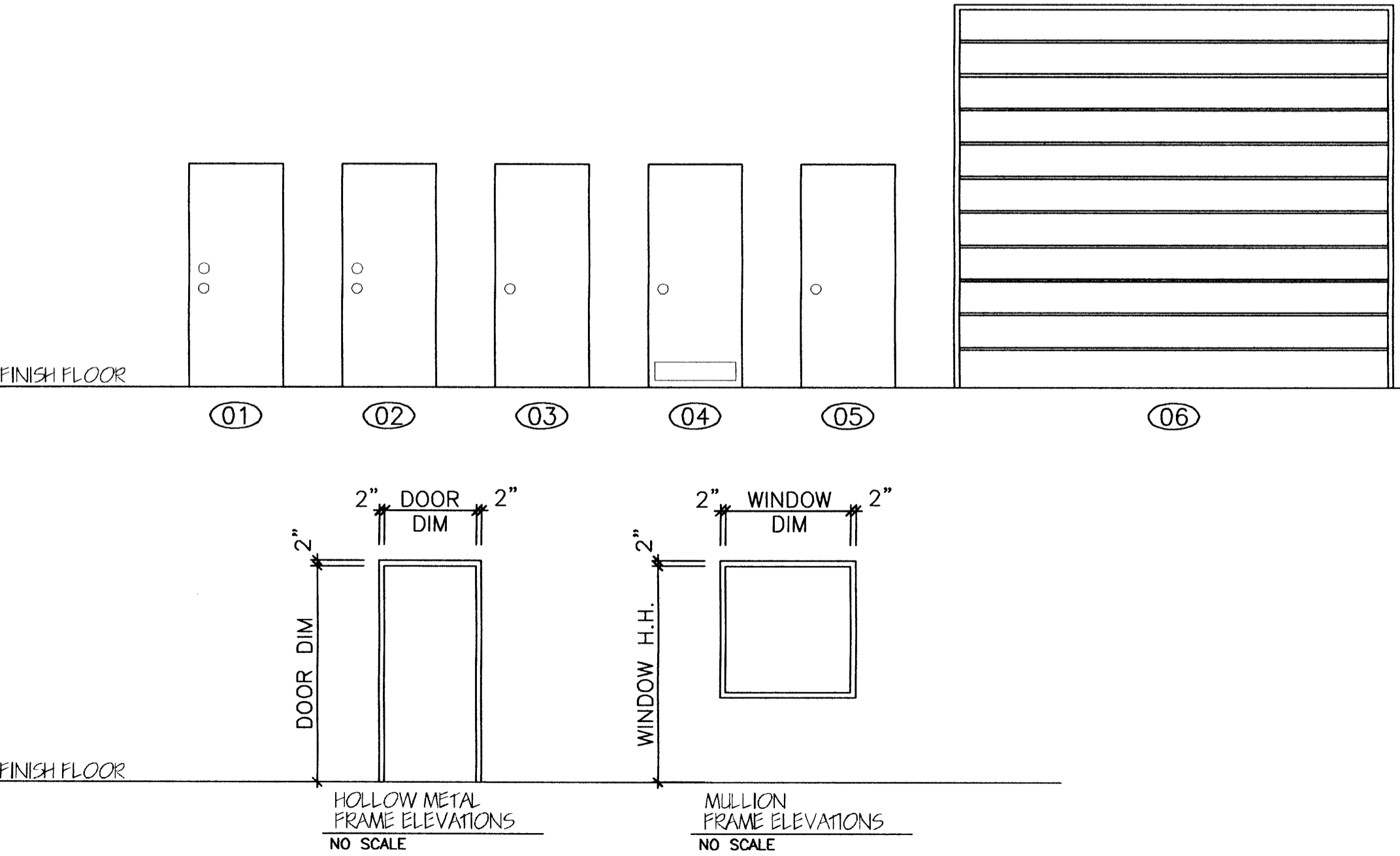
HW-02	HW-07	HW-12
3 ea Hinge BB1279 4.5 x 4.5 NRP 613 HA 1 ea Lockset 93K7R 15C 613 BE 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG	3 ea Hinge BB1279 4.5 x 4.5 640 HA 1 ea Lockset 93K7R 15C 613 BE 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG	3 ea Hinge BB1279 4.5 x 4.5 640 HA 1 ea Lockset 93K7R 15C 613 BE 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG

HW-03	HW-08	HW-13
3 ea Hinge BB1279 4.5 x 4.5 NRP 613 HA 1 ea Exit 8810 613 SA 1 ea Closer P1460-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG	3 ea Hinge BB1279 4.5 x 4.5 640 HA 1 ea Lockset 93K7R 15C 613 BE 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG	3 ea Hinge BB1279 4.5 x 4.5 640 HA 1 ea Lockset 93K7R 15C 613 BE 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG

HW-04	HW-09	HW-14
3 ea Hinge BB1279 4.5 x 4.5 NRP 613 HA 1 ea Exit 8810 613 SA 1 ea Closer P1460-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG	3 ea Hinge BB1279 4.5 x 4.5 640 HA 1 ea Lockset 93K7R 15C 613 BE 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG	3 ea Hinge BB1279 4.5 x 4.5 640 HA 1 ea Lockset 93K7R 15C 613 BE 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG

HW-05	HW-10	HW-15
3 ea Hinge BB1279 4.5 x 4.5 NRP 613 HA 1 ea Exit 8810 613 SA 1 ea Closer P1460-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG	3 ea Hinge BB1279 4.5 x 4.5 640 HA 1 ea Lockset 93K7R 15C 613 BE 1 ea Closer P1461-H-CUSH 695 LC 1 ea Kick 1905 10 x 1-1/2"LDW 613 HA 1 ea Threshold 425 628 NG 2 ea Sweep CB270k 313 NG 1 set Seal A626k Head and Jamba 313 NG	6 ea Hinge BB1279 4.5 x 4.5 640 HA 2 ea F Bolt 282 613 HA 1 ea DP Strike 280X 613 HA 1 ea Lockset 93K7R 15C 613 BE 2 ea OH Stop 4400 Series 613 AB 2 ea Silencer 3070 HA

DOOR SCHEDULE												
NUMBER	MATL	WIDTH	HEIGHT	THICK	FINISH	FR. MATL	FR. FIN	HW SET	HEAD	JAMB	SILL	REMARKS
01	WOOD	3'-0"	7'-0"	1 3/4"	WOOD	WOOD	WOOD	01	A1.4	A1.4	A1.4	
02	WOOD	3'-0"	7'-0"	1 3/4"	WOOD	WOOD	WOOD	02	A1.4	A1.4	A1.4	
03	WOOD	3'-0"	7'-0"	1 3/4"	WOOD	WOOD	WOOD	07	A1.4	A1.4	A1.4	
04	WOOD	3'-0"	7'-0"	1 3/4"	WOOD	WOOD	WOOD	04	A1.4	A1.4	A1.4	SELF-CLOSING
05	WOOD	3'-0"	7'-0"	1 3/4"	WOOD	WOOD	WOOD	09	A1.4	A1.4	A1.4	
06	METAL	14'-0"	12'-0"	1 3/4"	METAL	METAL	METAL					OVER HEAD DOOR



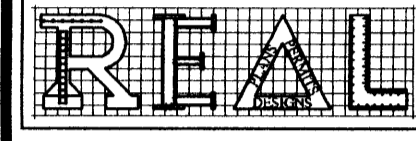
NOTES & ROOM FINISH SCHEDULES

NO SCALE

01

A1.5

REVISIONS	
No.	DESCRIPTION
1	
2	



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CITY OF HOUSTON
CODE ENFORCEMENT DIVISION

The owner is responsible for compliance with the Building Code. Such approved plans and specifications shall not be changed, modified or altered without authorizations from the building official, and all work shall be done in accordance with the approved plans.

02 JUL 2015 NO. 351

OWNER:

PROPOSED
METAL BUILDING
FOR OFFICE WAREHOUSE
LOCATED AT
10038 GROVER LANE
HOUSTON, TEXAS 77041

DRAWING TITLE:

NOTES & SCHEDULES

DATE: 12-03-14

DESIGN: 8613

DRAWN: 8613

SCALE: NO SCALE

JOB No: 14093033

FILE:

DRAWING

F:\REAL\30141\4010319\10038 GROVER LN\ARCH

GENERAL NOTES:

- SUSPENDED ACOUSTICAL CEILING SYSTEM IN SEISMIC DESIGN CATEGORY D, E OR F SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ASCE 7-05, CHAPTER 13 AND IBC SECTION 609.9 AND IBC CHAPTER 25.
- THE SUSPENDED CEILING AND LIGHTING SYSTEMS SHALL BE LIMITED TO 6 FEET BELOW THE STRUCTURAL DECK UNLESS THE LATERAL BRACING IS DESIGNED BY A LICENSED ENGINEER OR ARCHITECT.
- POSITIVE BRACING TO THE STRUCTURE SHALL BE PROVIDED AT CHANGES IN THE CEILING PLANE ELEVATION OR AT DISCONTINUITIES IN THE CEILING GRID SYSTEM.
- CABLE TRAYS, ELECTRICAL CONDUITS AND PIPING SHALL BE INDEPENDENTLY SUPPORTED AND INDEPENDENTLY BRACED FROM THE STRUCTURE.
- PERIMETER MEMBERS A MINIMUM WALL ANGLE SIZE OF AT LEAST A TWO INCH HORIZONTAL LEG SHALL BE USED AT PERIMETER WALLS AND INTERIOR FULL HEIGHT PARTITIONS. THE FIRST CEILING TILE SHALL MAINTAIN 3/4" CLEAR FROM THE FINISH WALL SURFACE. AN EQUIVALENT ALTERNATIVE DETAIL THAT WILL PROVIDE SUFFICIENT MOVEMENT DUE TO ANTICIPATED LATERAL BUILDING DISPLACEMENT MAY BE USED IN LIEU OF THE LONG LEG ANGLE SUBJECT TO THE APPROVAL OF THE SUPERINTENDENT OF BUILDING.
- SUSPENDED CEILING ASSEMBLIES LOCATED ALONG MEANS OF EGRESS SERVING AN OCCUPANT LOAD OF 30 OR MORE WHERE THE VERTICAL DISTANCE BETWEEN THE CEILING AND THE STRUCTURAL DECK SHALL COMPLY WITH THE FOLLOWING PROVISIONS:
 - CEILING SUSPENSION SYSTEMS SHALL BE CONNECTED AND BRACED WITH VERTICAL HANGERS ATTACHED DIRECTLY TO THE STRUCTURAL DECK ALONG THE MEANS OF EGRESS SERVING AN OCCUPANT LOAD OF 30 OR MORE AND AT LOBBIES ACCESSORY TO GROUP A OCCUPANCIES. SPACING OF VERTICAL HANGERS SHALL NOT EXCEED 2 FEET ON CENTER ALONG THE ENTIRE LENGTH OF THE SUSPENDED CEILING ASSEMBLY LOCATED ALONG THE MEANS OF EGRESS OR AT THE LOBBY.
 - ALL LAY-IN PANELS SHALL BE SECURED TO THE SUSPENSION CEILING ASSEMBLY WITH TWO HOLD DOWN CLIPS MINIMUM FOR EACH TILE WITHIN A 4'-0" RADIUS OF THE EXIT LIGHTS AND EXIT SIGNS.
 - INDEPENDENT SUPPORTS AND BRACES SHALL BE PROVIDED FOR LIGHT FIXTURES REQUIRED FOR EXIT ILLUMINATION. POWER SUPPLY FOR EXIT ILLUMINATION SHALL COMPLY WITH THE REQUIREMENTS OF IBC SECTION 1006.3.
 - SEPARATE SUPPORT FROM THE STRUCTURAL DECK SHALL BE PROVIDED FOR ALL APPENDAGES SUCH AS LIGHT FIXTURES, AIR DIFFUSERS, EXIT SIGNS, AND SIMILAR ELEMENTS.
- SPECIAL INSPECTION IS REQUIRED FOR SUSPENDED CEILING SYSTEM.

GENERAL STATEMENT:

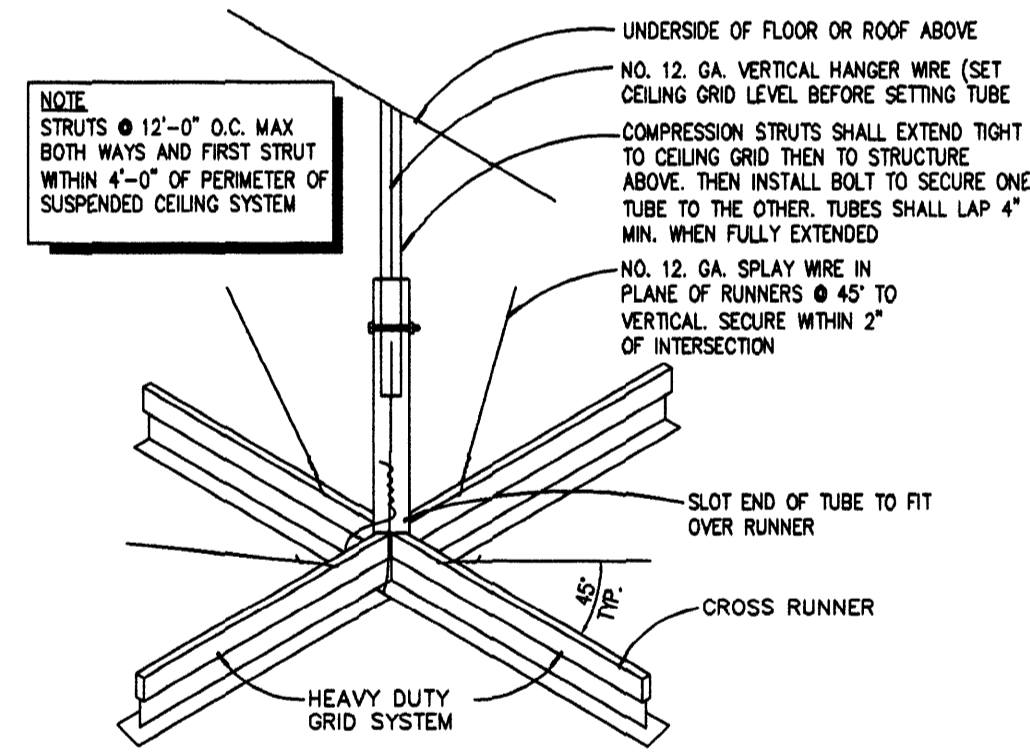
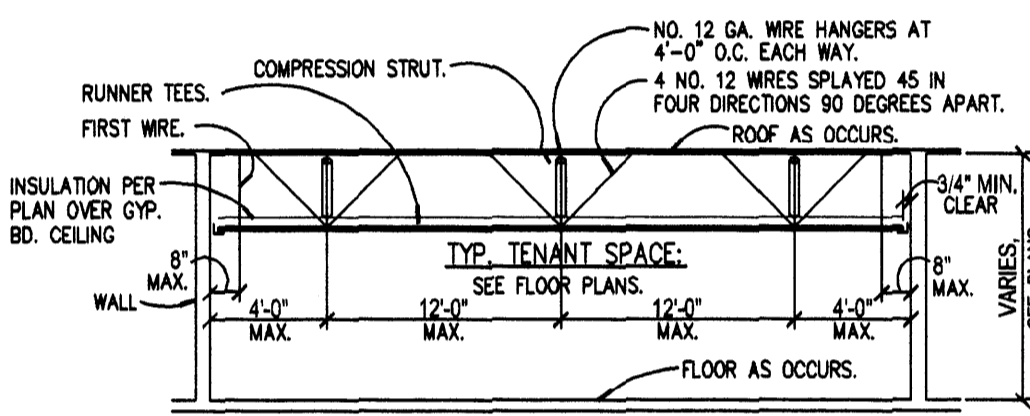
- WHERE THE CEILING LOADS DO NOT EXCEED 5 POUNDS PER SQUARE FOOT AND WHERE PARTITIONS ARE NOT CONNECTED TO THE CEILING SYSTEM, THE FOLLOWING BRACING METHOD SHALL BE USED.
- INSTALLATION OF COMPONENTS:**
- WIRE HANGERS FOR SUSPENDING CARRYING CHANNELS OR MAIN RUNNERS FROM AN EXISTING STRUCTURE SHALL BE A MINIMUM OF NO. 12 GAGE, GALVANIZED, SOFT ANNEALED, MILD STEEL WIRE. EACH ATTACHMENT SHALL BE WITH A MINIMUM OF THREE TURNS.
 - INTERSECTING WEBS AND FLANGES OF STRUCTURAL MEMBERS SHALL FORM ANGLES BETWEEN THEM OF 90 DEGREES +/- 2 DEGREES.
 - CARRYING CHANNELS AND MAIN RUNNERS SHALL BE INSTALLED SO THAT THEY ARE ALL LEVEL TO WITHIN 1/8 INCH IN 12 FEET. LOCAL KINKS OR BENDS SHALL NOT BE MADE IN HANGER WIRES BY A MEANS OF LEVELING CARRYING CHANNELS.
 - CROSS RUNNERS SHALL BE SUPPORTED BY EITHER MAIN RUNNERS OR BY OTHER CROSS RUNNERS NOT WITHIN 1/32 INCH OF THE REQUIRED CENTER DISTANCES.

ASCE 7-05 SECTION 13.5.6

- VERTICAL HANGERS, SUSPENSION WIRES SHALL NOT BE SMALLER THAN NO. 12 GAGE SPACED AT 4'-0" ON CENTER OR NO. 10 GAGE AT 5'-0" ON CENTER ALONG EACH MAIN RUNNER. EACH VERTICAL WIRE SHALL BE ATTACHED TO THE CEILING SUSPENSION MEMBER AND TO THE SUPPORT ABOVE WITH A MINIMUM OF THREE TURNS. ANY CONNECTION DEVICE AT THE SUPPORTING CONSTRUCTION SHALL BE CAPABLE OF CARRYING NOT LESS THAN 100 POUNDS. SUSPENSION WIRES SHALL NOT HAVE MORE THAN 1 IN 6 OUT OF PLUMB UNLESS COUNTER SLOPING WIRES ARE PROVIDED. WIRES SHALL NOT ATTACH TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT. A TRAPEZOID OR EQUIVALENT DEVICE SHALL BE USED WHERE OBSTRUCTIONS PRECLUDE DIRECT SUSPENSION. TRAPEZOID SUSPENSIONS SHALL BE A MINIMUM OF BACK TO BACK 1-1/4" COLD - ROLLED CHANNELS FOR SPANS EXCEEDING 48".
- PERIMETER HANGERS: THE TERMINAL ENDS OF EACH CROSS RUNNER AND MAIN RUNNER SHALL BE SUPPORTED INDEPENDENTLY A MAXIMUM OF 8" FROM EACH WALL OR CEILING DISCONTINUITY WITH NO. 12 GAGE WIRE OR APPROVED WALL SUPPORT.
- LATERAL FORCE BRACING: HORIZONTAL RESTRAINTS SHALL BE EFFECTED BY FOUR NO. 12 GAGE WIRES SECURED TO THE MAIN RUNNER WITHIN TWO INCHES OF THE CROSS RUNNER INTERSECTION AND SPACED 90 DEGREES FROM EACH OTHER AT AN ANGLE NOT EXCEEDING 45 DEGREES FROM THE PLANE OF THE CEILING. A STRUT FASTEN TO THE MAIN RUNNER SHALL BE EXTENDED TO AND FASTENED TO THE STRUCTURAL MEMBERS SUPPORTING THE ROOF OR FLOOR ABOVE. THE STRUT SHALL BE ADEQUATE TO RESIST THE VERTICAL COMPONENT INDUCED BY THE BRACING WIRES. THESE HORIZONTAL RESTRAINT POINTS SHALL BE PLACED 12 FEET ON CENTER IN BOTH DIRECTIONS WITH THE FIRST POINT WITHIN 4'-0" FROM EACH WALL. ATTACHMENT OF THE RESTRAINT WIRES TO THE STRUCTURE SHALL BE ADEQUATE FOR THE LOAD IMPOSED. LATERAL FORCE BRACING MEMBERS SHALL BE SPACED A MINIMUM OF 6 INCHES FROM ALL HORIZONTAL PIPING OR DUCT WORK THAT IS NOT PROVIDED WITH BRACING RESTRAINTS FOR HORIZONTAL FORCE. BRACING WIRES SHALL BE ATTACHED TO THE GRID AND TO THE STRUCTURE IN SUCH A MANNER THAT THEY CAN SUPPORT A DESIGN LOAD OF NOT LESS THAN 200 POUNDS OR THE ACTUAL DESIGN LOAD, WHICHEVER IS GREATER, WITH A SAFETY FACTOR OF 2.
- PERIMETER MEMBERS: UNLESS PERIMETER MEMBERS ARE A STRUCTURAL PART OF THE APPROVED SYSTEM, WALL ANGLES OR CHANNELS SHALL BE CONSIDERED AS AESTHETIC CLOSURES AND WITH NO STRUCTURAL VALUE. FOR TILE CEILING, ENDS OF MAIN RUNNERS AND CROSS MEMBERS SHALL BE TIED TOGETHER TO PREVENT THEIR SPREADING.
- MAIN RUNNERS AND CROSS RUNNERS MAY BE ATTACHED TO THE PERIMETER MEMBER AT TWO ADJACENT WALLS WITH CLEARANCE BETWEEN THE WALL AND THE RUNNERS MAINTAINED AT THE TWO OTHER WALLS.

LIGHTING FIXTURES:

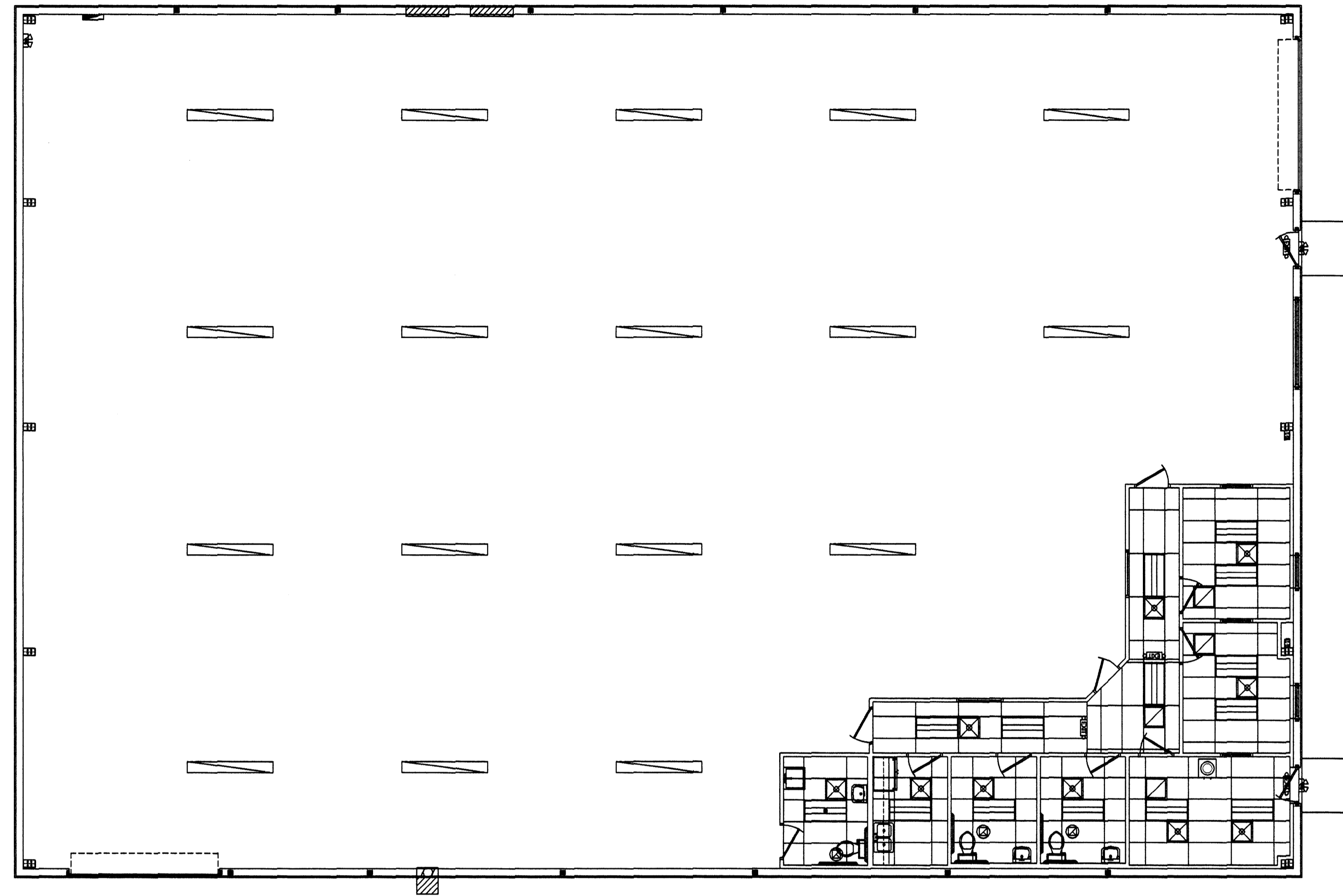
- ALL LIGHTING FIXTURES SHALL BE POSITIVELY ATTACHED TO THE SUSPENDED CEILING SYSTEM. THE ATTACHMENT DEVICE SHALL HAVE A CAPACITY OF 100% OF THE LIGHTING FIXTURE WEIGHT ACTING IN ANY DIRECTION. NO. 12 GAGE HANGERS SHALL BE ATTACHED TO THE GRID MEMBERS WITHIN 3" OF EACH CORNER OF EACH FIXTURE. TANDEM FIXTURES MAY UTILIZE COMMON WIRES.
 - LIGHTING FIXTURES WEIGHING LESS THAN 56 POUNDS SHALL HAVE, IN ADDITION TO THE REQUIREMENTS OUTLINED ABOVE, TWO NO. 12 GAGE HANGERS CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE. THESE WIRES MAY BE SLACK.
 - LIGHTING FIXTURES WEIGHING 56 POUNDS OR MORE SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY APPROVED HANGERS.
 - PENDANT-HUNG LIGHTING FIXTURES SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE USING NO. 9 GAGE WIRE OR APPROVED ALTERNATE SUPPORT WITHOUT USING THE CEILING SUSPENSION SYSTEM FOR DIRECT SUPPORT.
- MECHANICAL:**
- AIR DIFFUSERS WHICH WEIGH NOT MORE THAN 20 LBS., AND WHICH RECEIVE NO TRIBUTARY LOADING FROM DUCT WORK MAY BE POSITIVELY ATTACHED TO AND SUPPORTED BY DHT CEILING RUNNERS.



**ARMSTRONG SUSPENDED GYPSUM BOARD CEILING
DETAIL / NOTES (ICC-ES: ESR-1289)**

NO SCALE

06



REFLECTIVE CEILING PLAN

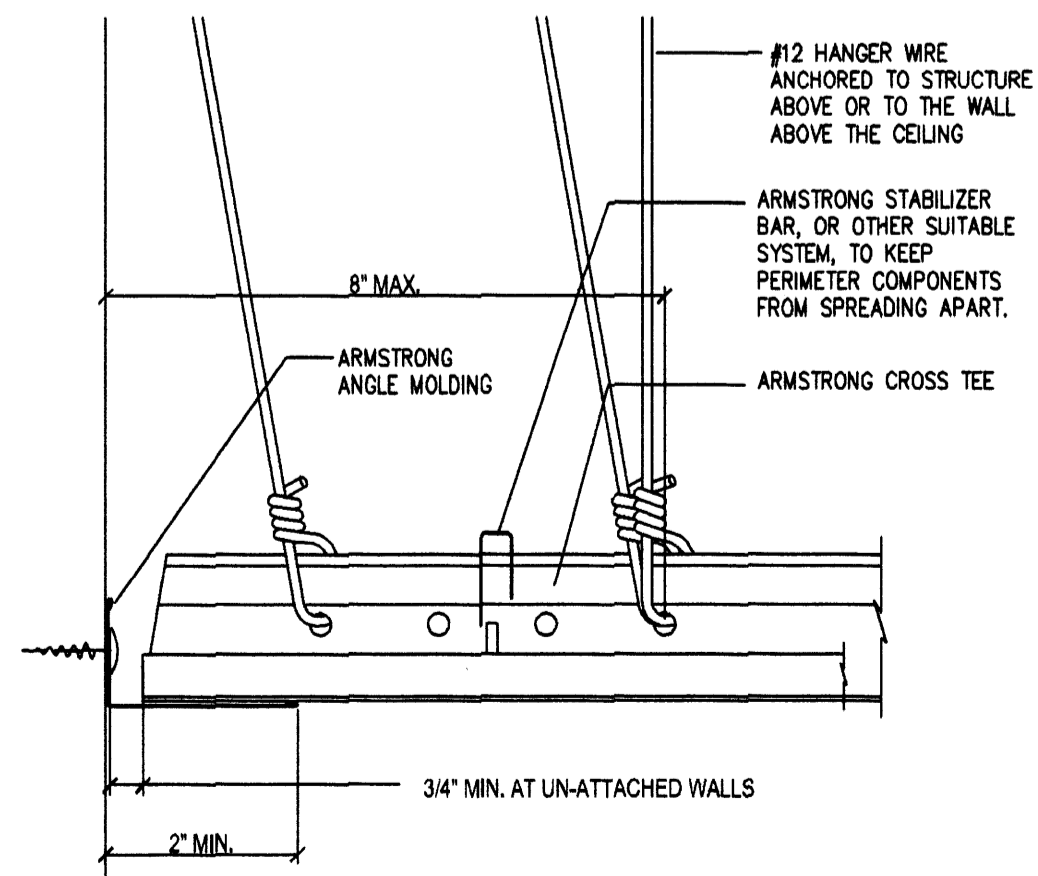
1/8" = 1'-0"

05

NAME	SYMBOL	DESCRIPTION
X1	(EXIT)	INTERNALLY ILLUMINATED EXIT SIGN
EGL	(EGL)	INTERNALLY AND EXTERNAL ILLUMINATED EGRESS
EF1	(EF1)	EXHAUST FAN, 50 CFM
FL1	(FL1)	2X4 FLOURESCENT LAY IN LIGHT FIXTURE
FL2	(FL2)	8' FLOURESCENT SUSPENDED LIGHT FIXTURE
RG	(RG)	2X2 RETURN GRILLE
SD1	(SD1)	2X2 SUPPLY DIFFUSER

NOTES:

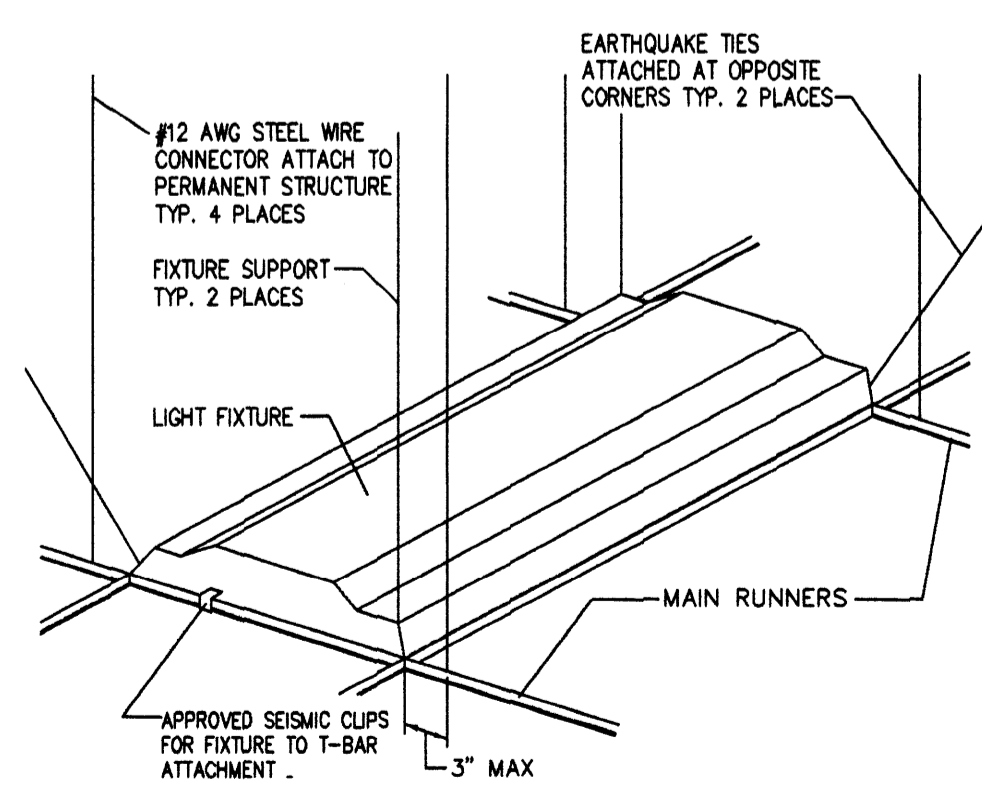
- SUSPENDED CEILING IN TAKE OUT AREA IS EXISTING TO REMAIN IN PLACE. LAY-IN LIGHT FIXTURES AND AIR DISTRIBUTION ARE EXISTING AND SHALL EITHER REMAIN IN PLACE OR BE RELOCATED AS SHOWN ON PLAN. CONTRACTOR TO REPAIR AND CLEAN AS NEEDED TO ACHIEVE AN "AS NEW" APPEARANCE.
- EXITS SHALL BE ILLUMINATED AT ANY TIME THE BUILDING / TENANT SPACE IS OCCUPIED WITH A LIGHT INTENSITY OF NOT LESS THAN ONE FOOT (1 FT/C) CANDLE @ FLOOR LEVEL - TYPICAL - SEE ELECTRICAL DRAWINGS.
- ELECTRICAL CONTRACTOR TO ENSURE COMPLIANCE WITH CURRENT TITLE 24 MANDATORY MEASURES.
- EXISTING MECHANICAL UNITS TO REMAIN IN PLACE, ONLY LOCATION OF DIFFUSERS SHALL BE MODIFIED.
- FIXTURES NOTED WITH (NL) SHALL BE NIGHT LIGHT FIXTURES.
- FIXTURES NOTED WITH (EM) SHALL BE PROVIDED WITH 90 MINUTE BATTERY BACKUP.
- ALL EXISTING LIGHT FIXTURES TO BE REUSED SHALL BE REPAIRED AND CLEANED AS NEEDED TO ACHIEVE AN "AS NEW" APPEARANCE.



**SUSPENDED CEILING DETAIL
PERIMETER DETAIL**

NO SCALE

03



**SUSPENDED CEILING
LIGHT FIXTURE SUPPORT DETAIL**

NO SCALE

02

MATERIALS	TRADE SIZE		ALLOWABLE LENGTH
	STRUT A	STRUT B	
EMT	1/2"	3/4"	3'-10"
EMT	3/4"	1"	5'-2"
EMT	1"	1 1/4"	6'-6"
EMT	1 1/4"	1 1/2"	8'-6"
METAL STUD	6" x 20GA (SEE NOTE 4)		OVER 8'-6"

COMPRESSION STRUT NOTES:

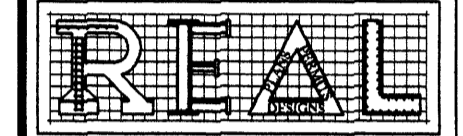
- THE STRUT SHALL BE VERTICAL AND NOT HANG MORE THAN 1 IN 6 OUT OF PLUMB.
- ALL STRUT MEETING THE SPECIFICATIONS OF THIS TABLE WILL BE PRESUMED TO MEET THE REQUIREMENTS OF THE CODE. OTHER DESIGN CONFIGURATIONS MUST CONFORM TO THE DESIGN REQUIREMENTS OF THE CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE.
- EACH STRUT MUST BE ACCOMPANIED BY A TENSION WIRE LOCATED ON THE INSIDE OF IMMEDIATELY TO (WITHIN 1") AND PARALLEL TO THE STRUT.
- WHEN USING METAL STUDS AS COMPRESSION STRUT MEMBER STUDS SHALL BE BACK TO BACK AND FASTENED WITH #6 TEK SCREWS, STAGGERED AT 16" O.C.

**SUSPENDED CEILING
COMPRESSION STRUT CABLE**

NO SCALE

01

REVISIONS	
No.	DATE
1	
2	



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OWNER:

**TRUCK
SALES**

**PROPOSED
METAL BUILDING
FOR OFFICE WAREHOUSE
LOCATED AT
10038 GROVER LANE
HOUSTON, TEXAS 77041**

DRAWING TITLE:

**REFLECTIVE
CEILING PLAN**

DATE:	12-03-14
DESIGN:	8613
DRAWN:	8613
SCALE:	1/8" = 1'-0"
JOB No:	14093033
FILE:	
DRAWING	

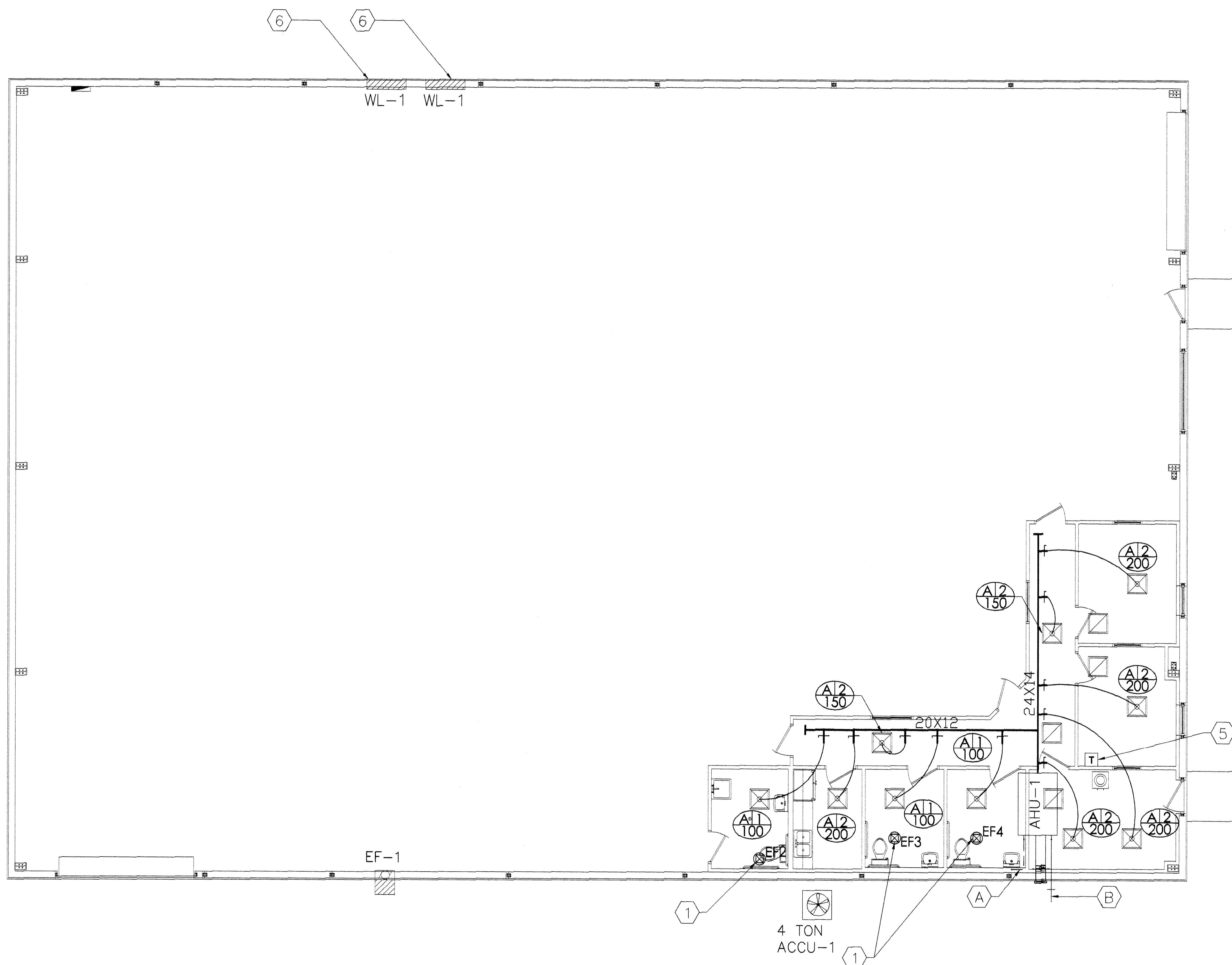
A1.6

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FOR BUILDING PERMIT ONLY
CITY OF HOUSTON
CODE ENFORCEMENT DIVISION**

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02 JUL 2015

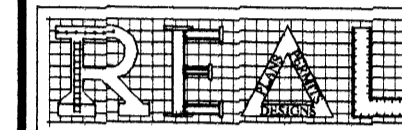
NO. 351



**APPROVED
HVAC PLAN**

HIS PLAN MUST BE KEPT ON JOB FOR ALL CIT INSPECTORS. SEPARATE PERMIT IS REQUIRED FOR HVAC.

NO. 395
15034588
4/17/15



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OWNER:

**TRUCK
SALES**

**PROPOSED
METAL BUILDING
FOR OFFICE WAREHOUSE
LOCATED AT
10038 GROVER LANE
HOUSTON, TEXAS 77041**

DRAWING TITLE:

**MECHANICAL
PLAN**

DATE: **12-03-14**

DESIGN: **8530**

DRAWN: **8613**

SCALE: **3/16"= 1'-0"**

JOB No: **14093033**

FILE: **F:\REAL\2014\4093033\10038 GROVER LANE.MECH**

DRAWING

---	(A)	3/4" CONDENSATE DRAIN LINE (PRIMARY). ROUTE TO APPROVED PLUMBING FIXTURE.
---	(B)	3/4" SECONDARY CONDENSATE LINE. ROUTE TO OUTSIDE 6" TO 24" ABOVE GRADE IN A PERVIOUS AREA NOT IN A PUBLIC WAY AS PER H.M.C. 310.1.
CONDENSATE LEGEND		NO SCALE 04

ALL SUPPLY OR RETURN DUCT TO BE R-8 INSULATED.		
DUCT CONSTRUCTION		NO SCALE 03

<p>(1) 4" EXHAUST S.S. ROUND DUCT TO ROOF CAP. RE: SHEET M1.3 DETAIL #1.</p> <p>(2) 24" X 12" RETURN AIR GRILLE WITH 1' FILTER ABOVE CEILING.</p> <p>(3) 12"Ø OUTSIDE AIR DUCT WITH MOTORIZED VOLUME DAMPER.</p> <p>(4) 16"X16" OUTSIDE AIR LOUVER MIN. 50% FREE AIR PROVIDE 1/4" SCREEN MESH.</p> <p>(5) VERIFY THE LOCATION OF THERMOSTAT WITH THE ARCHITECT/OWNER PRIOR TO INSTALLATION.</p> <p>(6) 4'-0"x4'-0" GALVANIZED ADJUSTABLE LOUVER, 10'-0" A.F.F.</p>		
KEYED NOTES		NO SCALE 02

MECHANICAL PLAN

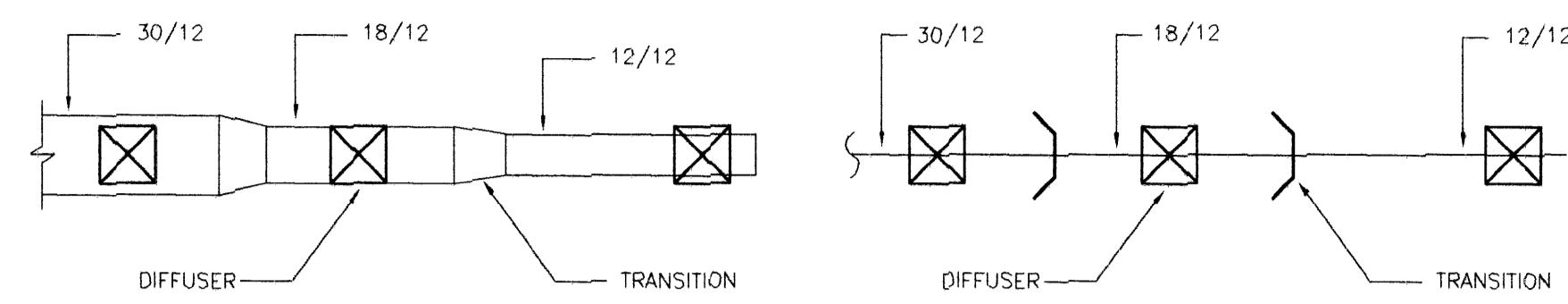
3/16"= 1'-0"

01

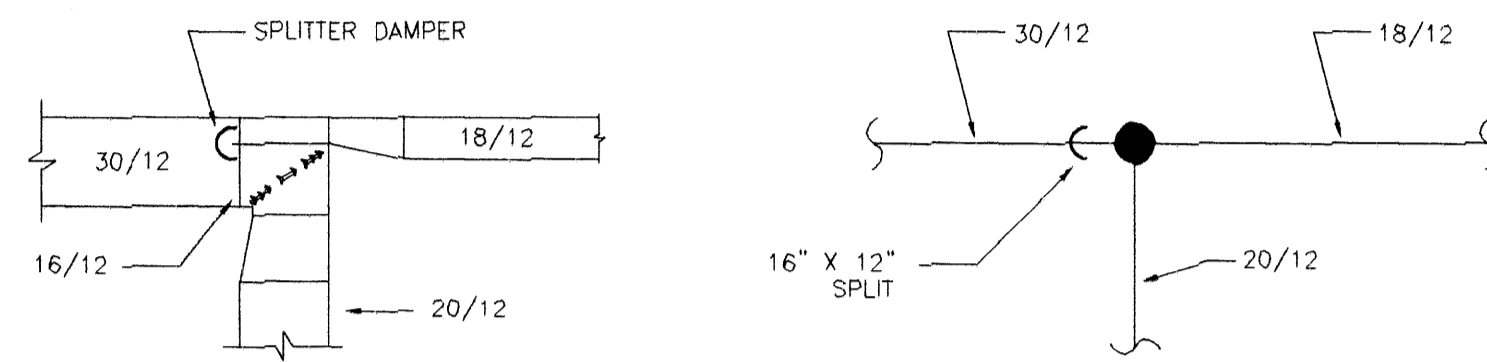
M1.1

No.	DATE	DESCRIPTION
1		
2		

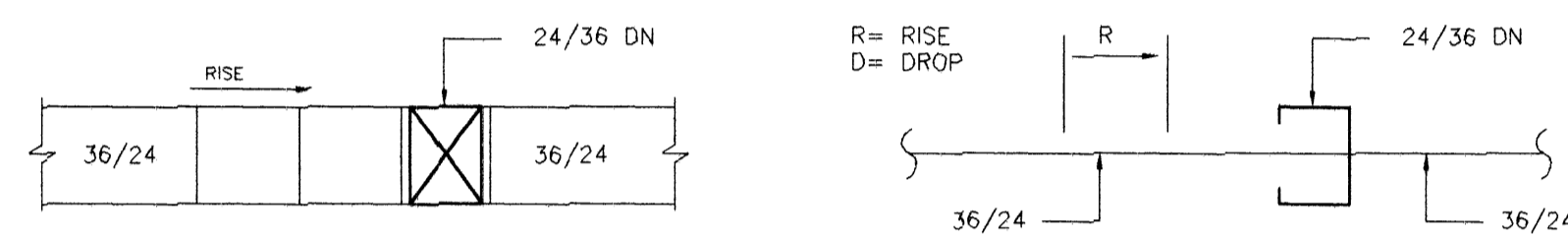
2. I, the undersigned, being a duly Licensed Professional Engineer in the State of Texas, hereby certify that I am the Designer of the herein described structure and that I am a duly Licensed Professional Engineer in the State of Texas. I am not responsible for the architectural and structural design in any way or matter.



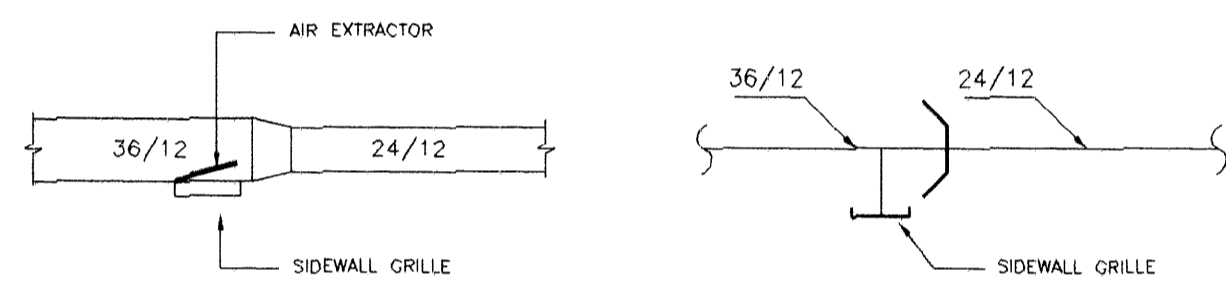
TRANSITION



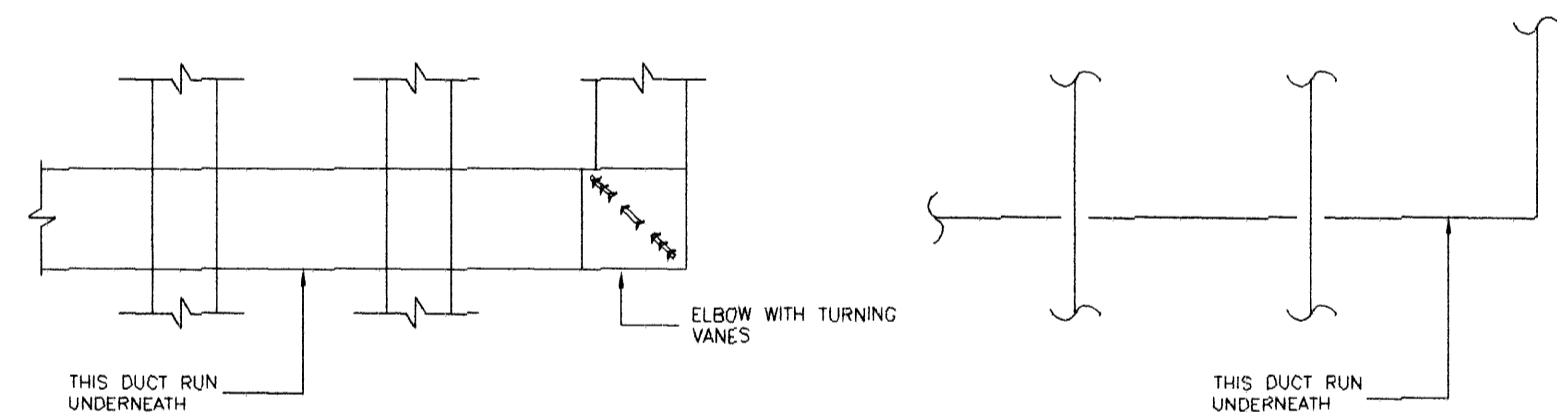
MAIN BRANCH TAKE-OFF



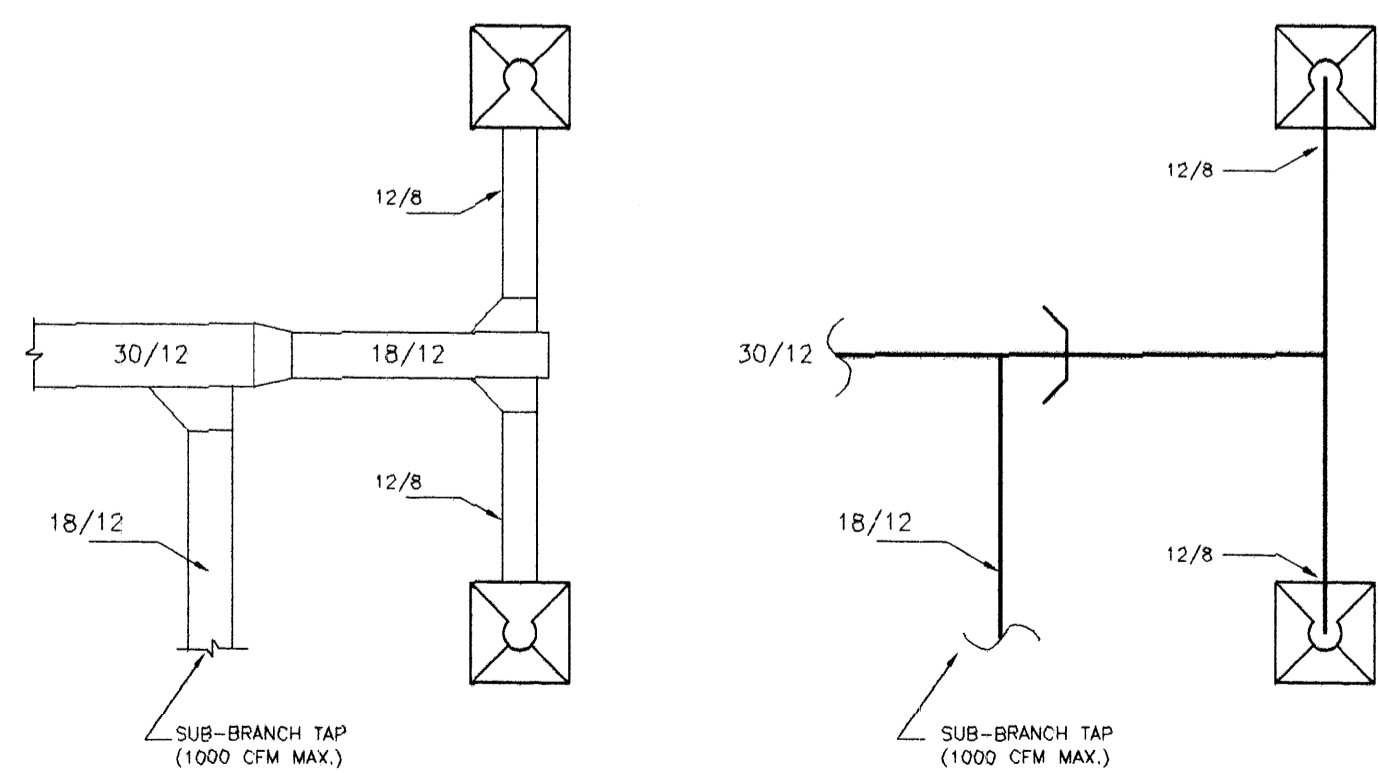
RISERS



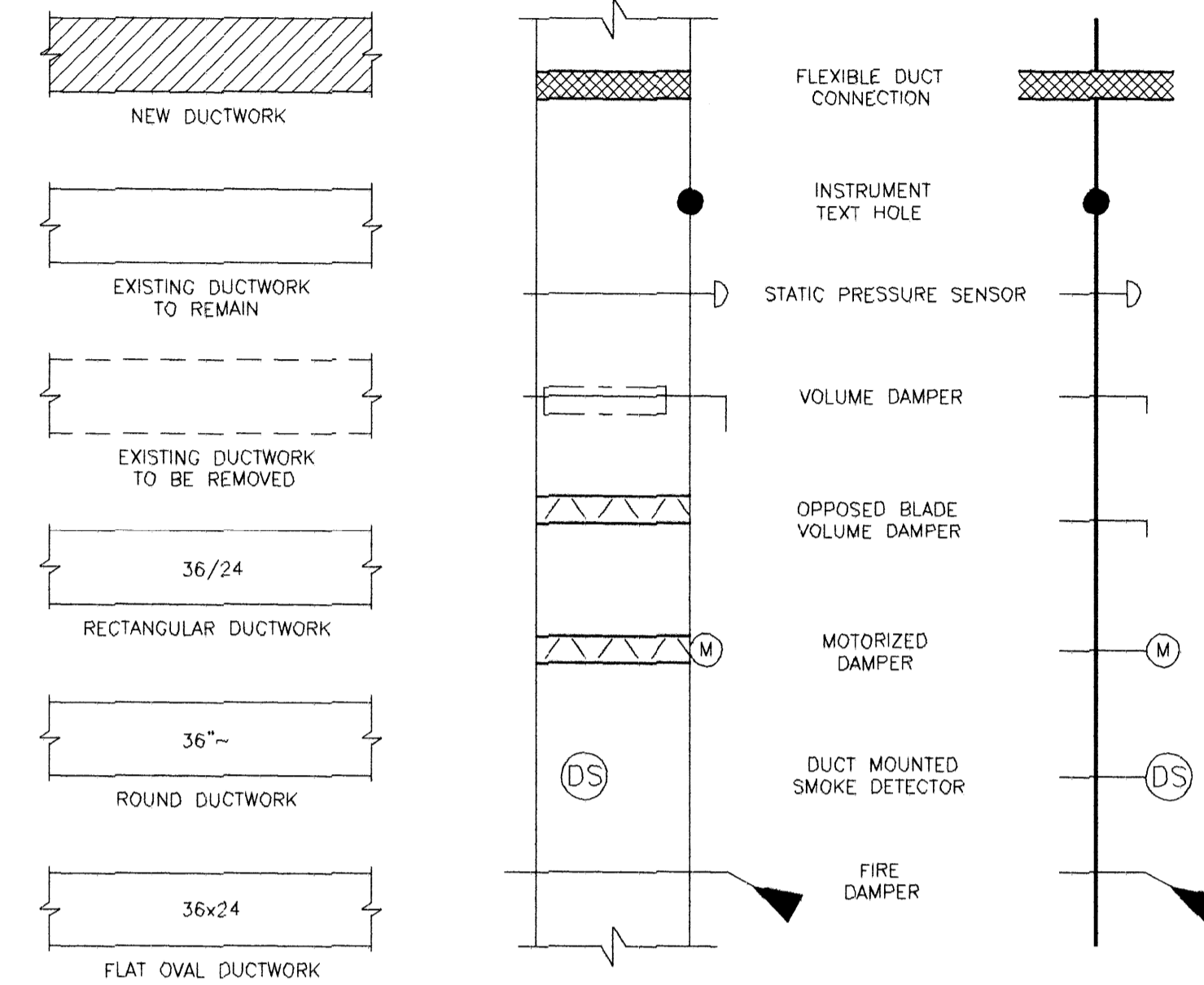
SIDEWALL REGISTER



DUCT CROSS OVER



SUB-BRANCH TAP AND TEE



TWO LINE DUCTWORK LEGEND TWO LINE DUCTWORK SYMBOLS ONE LINE DUCTWORK LEGEND

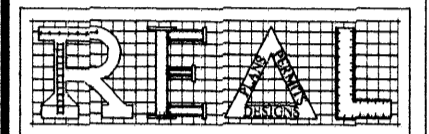
- NEW DUCTWORK-- INSIDE CLEAR DIMENSION
- NEW FLEXIBLE DUCT
- EXHAUST AIR GRILLE
- RETURN AIR GRILLE
- SUPPLY AIR DIFFUSER
- CHILLED WATER SUPPLY LINE
- CHILLED WATER RETURN LINE
- THERMOSTAT
- HUMIDSTAT
- EMERGENCY SMOKE CONTROL SWITCH

APPROVED HVAC PLAN

THIS PLAN MUST BE KEPT ON JOB FOR ALL CITY INSPECTORS. SEPARATE PERMIT IS REQUIRED FOR HVAC.

NO. 395
#15074588
4/17/15

REVISIONS	No.	DATE	DESCRIPTION
	1		
	2		



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OWNER:

TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:

MECHANICAL LEGEND

DATE:

12-03-14

DESIGN:

8530

DRAWN:

8530

SCALE:

NO SCALE

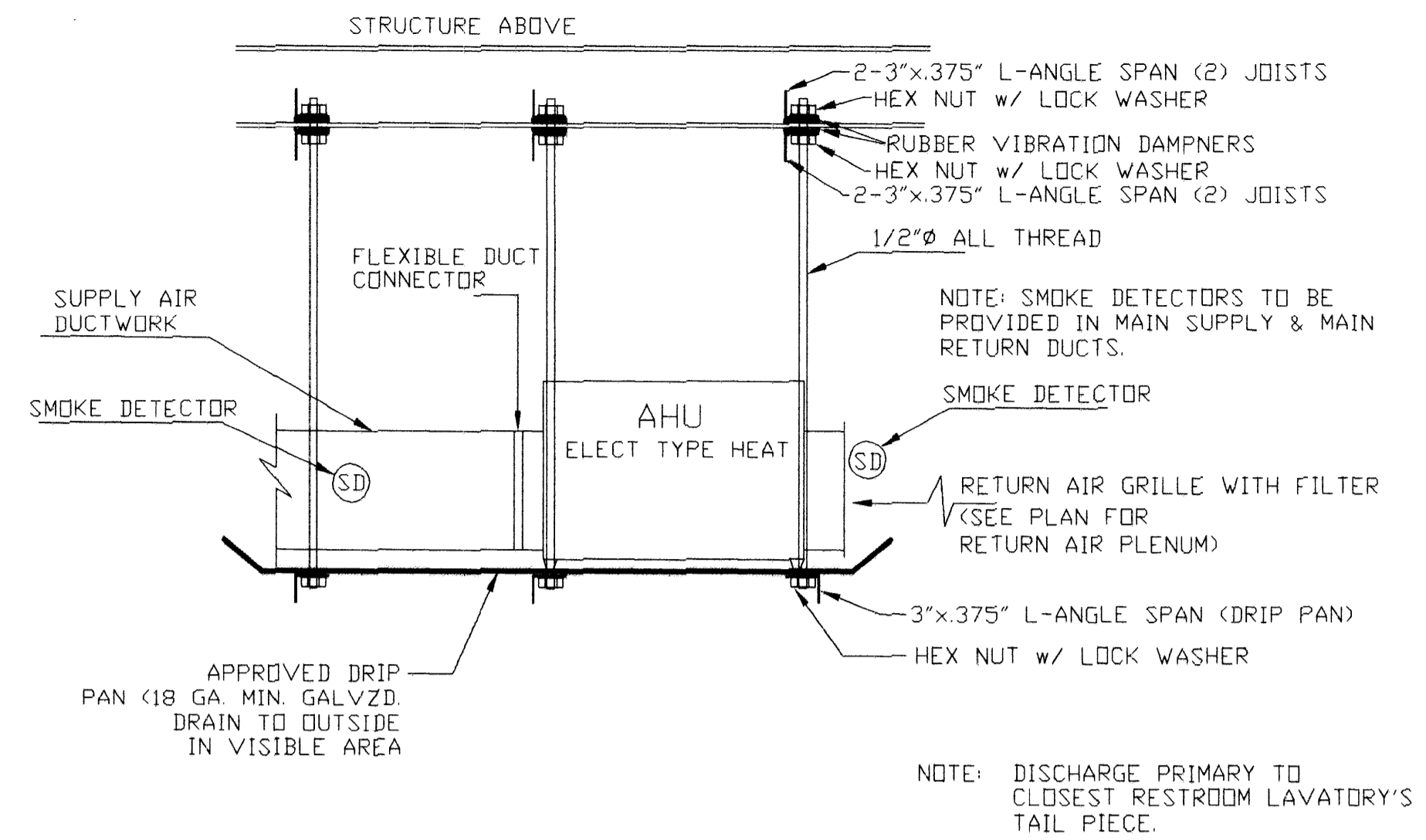
JOB No:

14093033

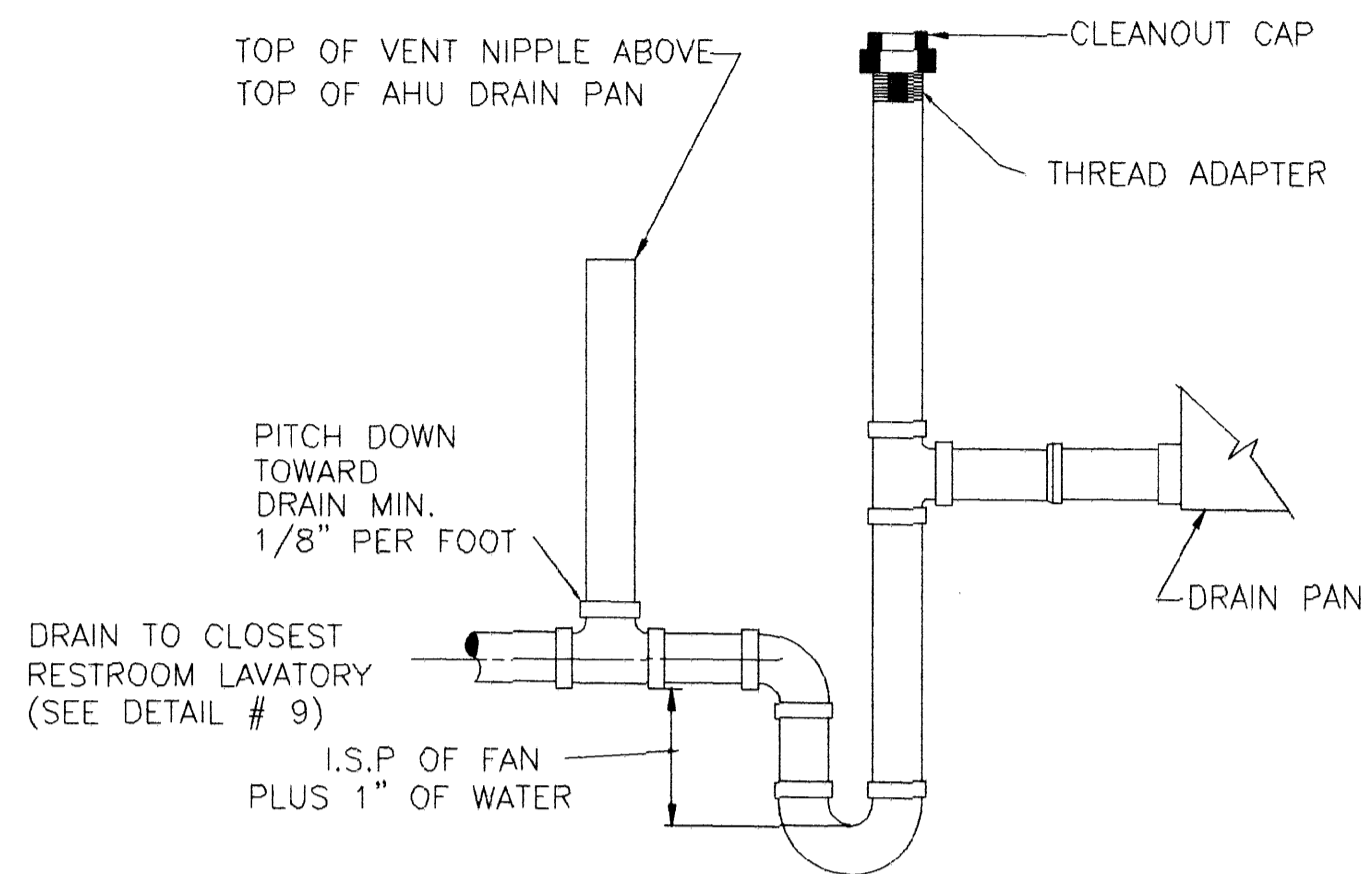
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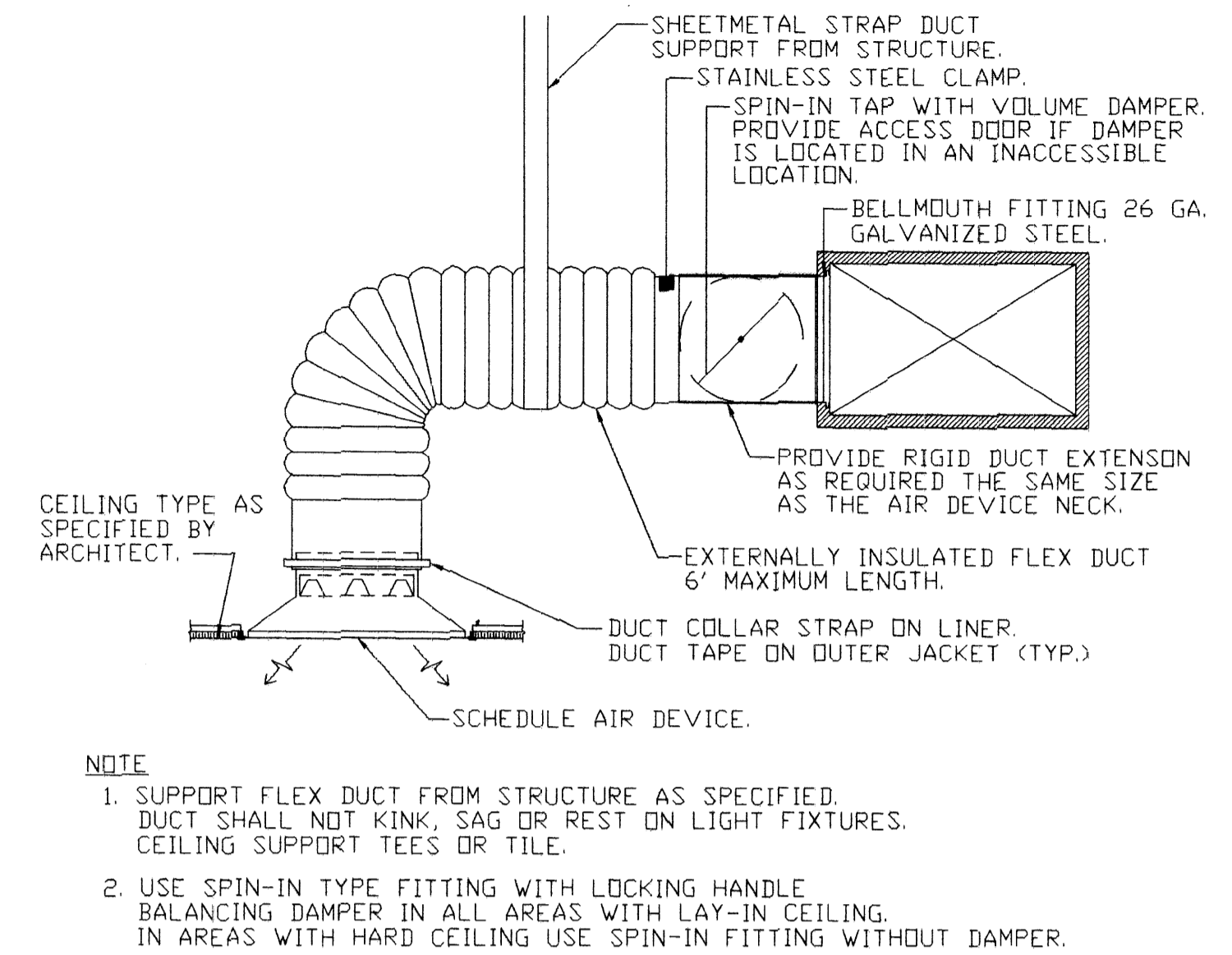
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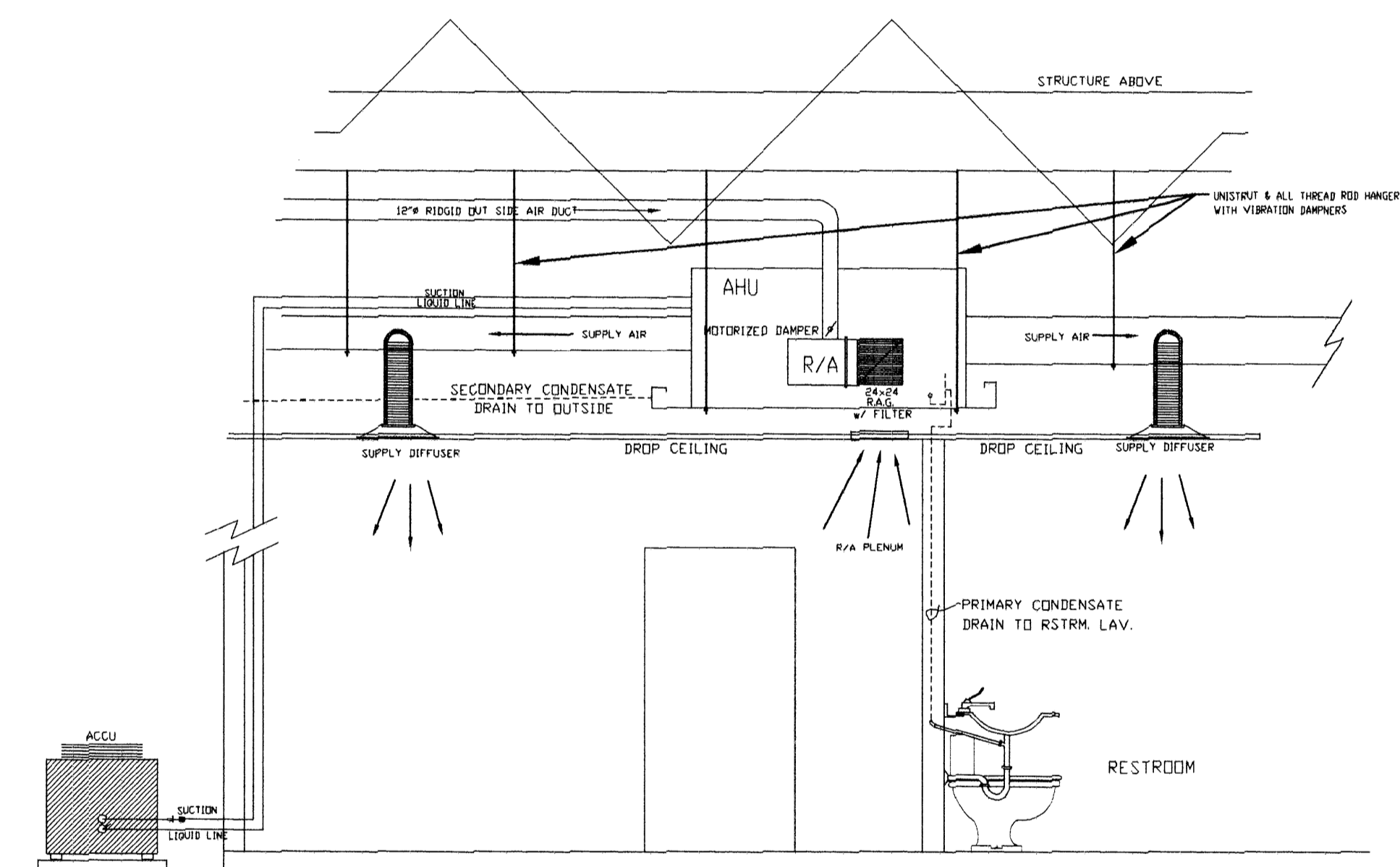
DETAIL SUSPENDED AIR HANDLER UNIT NO SCALE 09



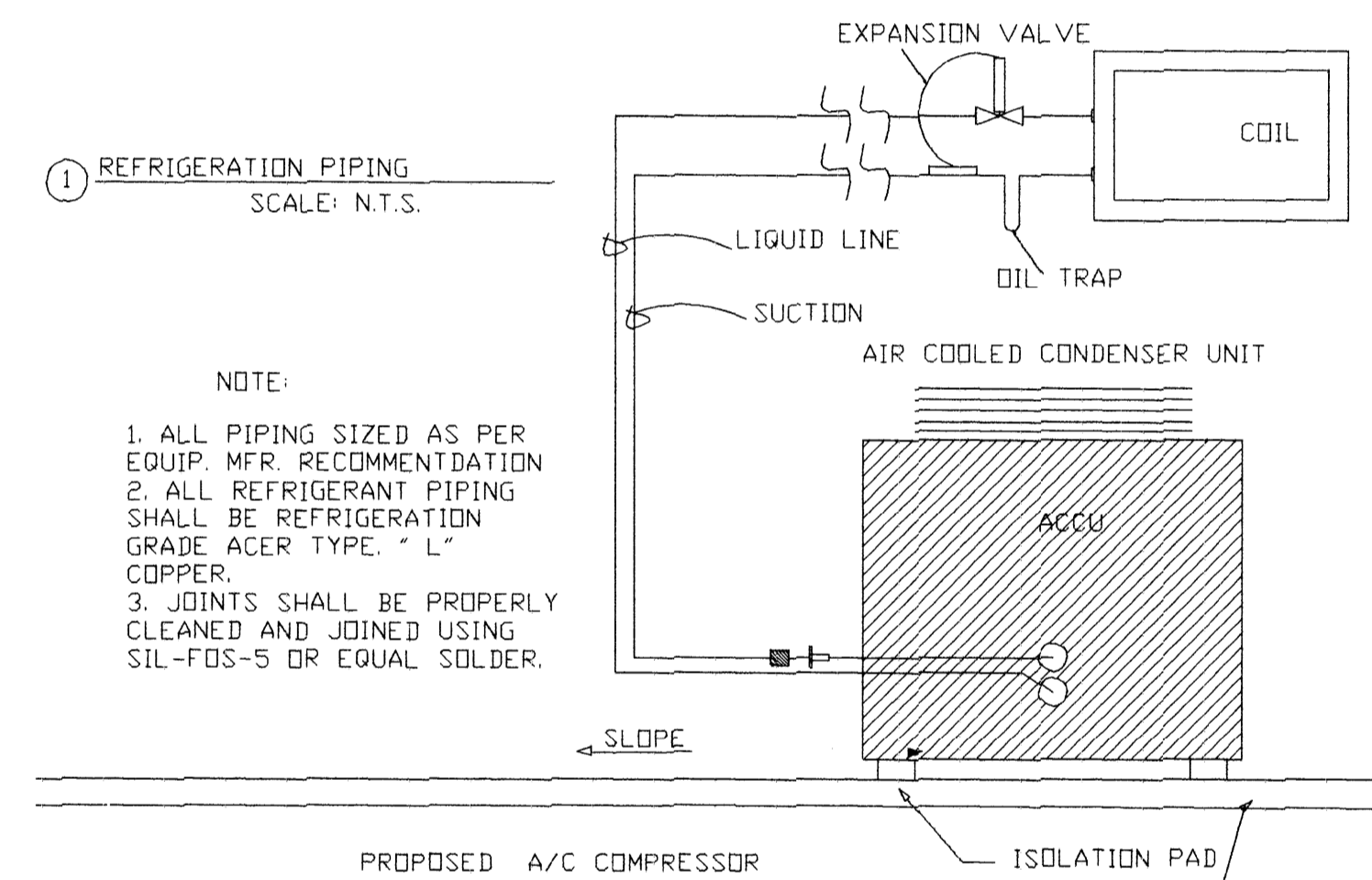
TYPICAL AHU CONDENSATE DRAIN DETAIL NO SCALE 06



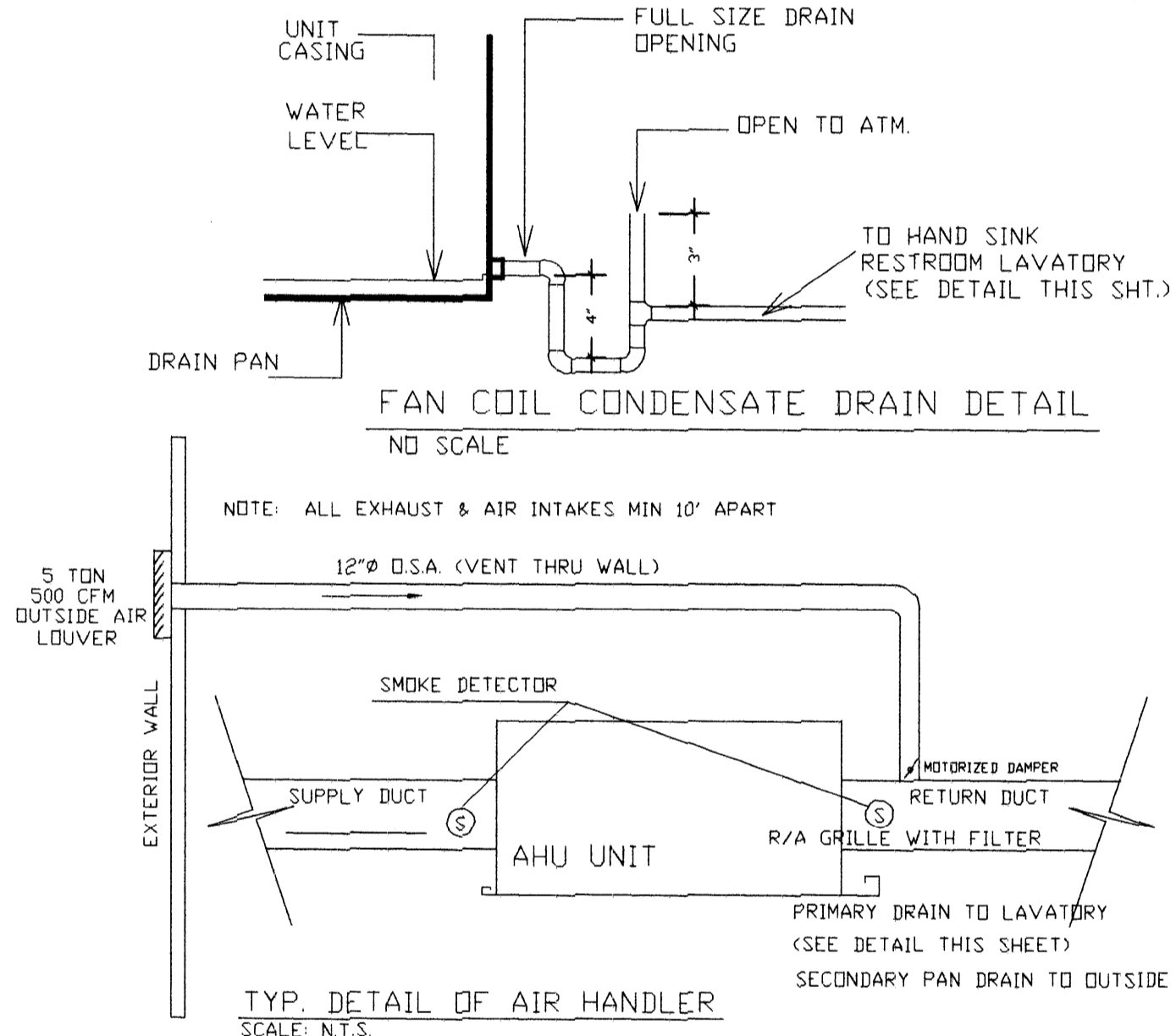
SUPPLY AIR DEVICE DETAIL NO SCALE 03



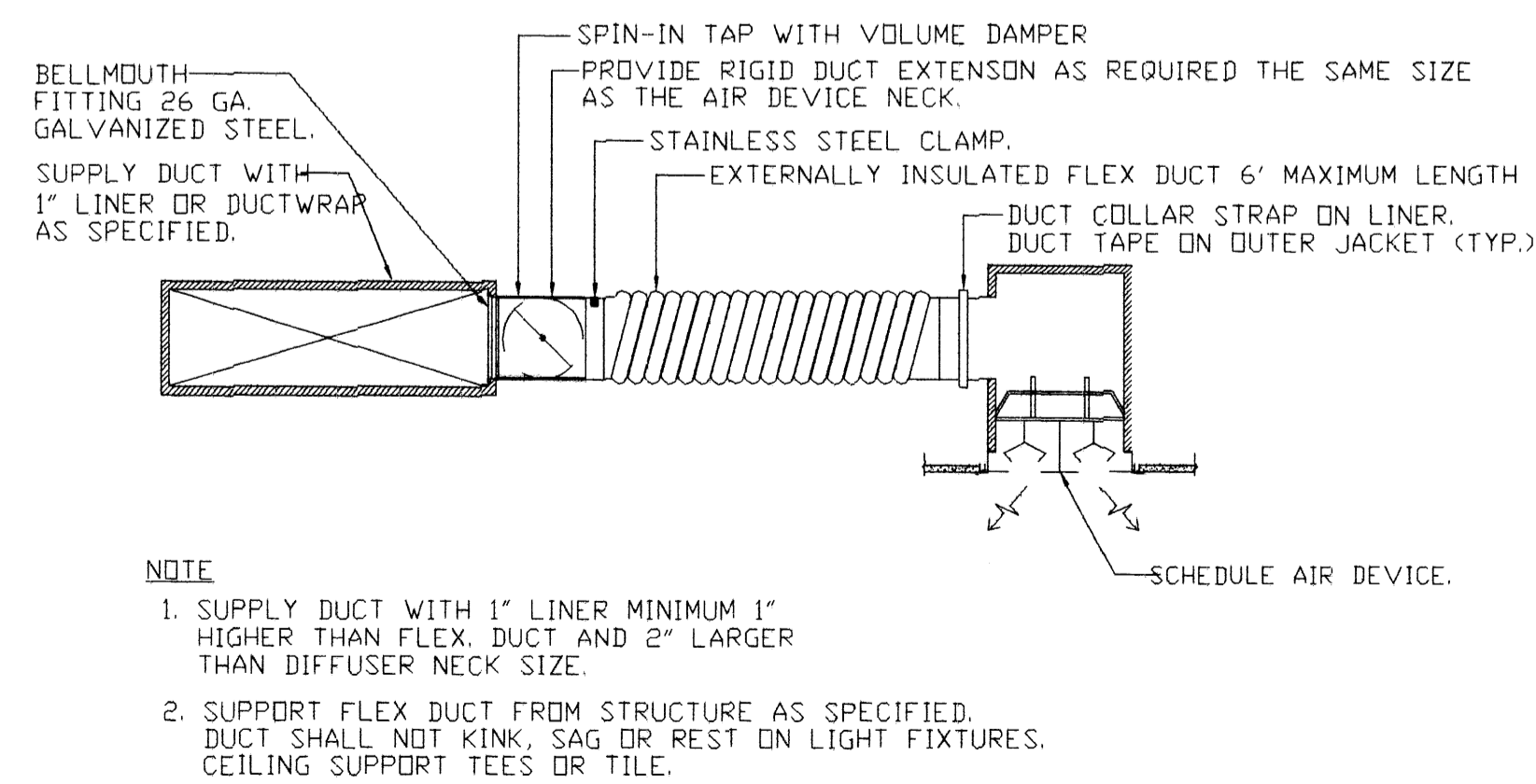
SECTION DETAIL SUSPENDED AHU SUPPLY AIR NO SCALE 08



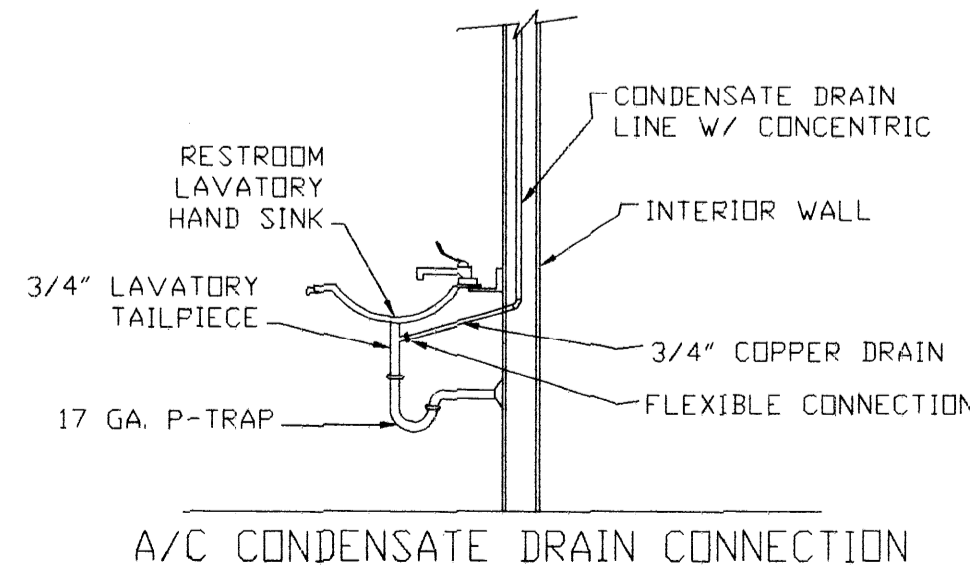
REFRIGERATION PIPING AT COMPRESSOR UNIT NO SCALE 05



O.S.A. SUPPLY DETAIL NO SCALE 02

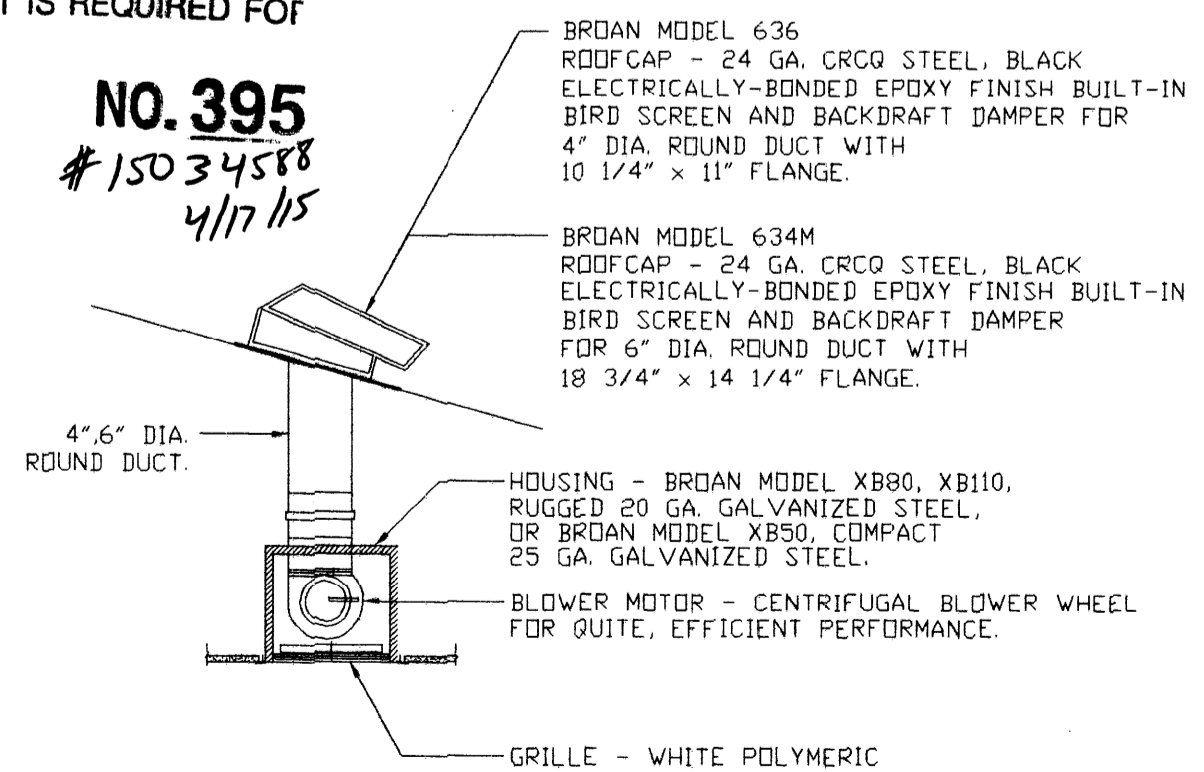


FLEXIBLE DUCT DETAIL NO SCALE 07



CONDENSATE DRAIN DETAIL NO SCALE 04

APPROVED HVAC PLAN
 HIS PLAN MUST BE KEPT ON JOB FOR ALL CITY INSPECTORS. SEPARATE PERMIT IS REQUIRED FOR HVAC.



EXHAUST FAN DETAIL NO SCALE 01

NO.	DATE	DESCRIPTION
1		
2		

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OWNER:
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PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:
MECHANICAL DETAILS

DATE:	12-03-14
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SCALE:	NO SCALE
JOB No:	14093033
FILE:	
DRAWING	

M1.3

OUTSIDE AIR INTAKE CALCULATION

BASED ON 2006 UMC WITH HOUSTON AMENDMENTS TABLE 4-1 #ACCU-1 & AHU-1

ROOM NAMES	AREA SF.	CFM/SF	CFM EA.	TOTAL
OFFICES	276	0.08		22.1 CFM
RESTROOMS	3 WC		50.0	150.0 CFM
HALLWAY	250	0.05		12.5 CFM
BREAKROOM	83	0.25		20.8 CFM
RECEPTIONIST	185	0.20		37.0 CFM
TOTAL REQUIRED				242.4 CFM
TOTAL PROVIDED				400.0 CFM

OUTSIDE AIR INTAKE CALCULATION

BASED ON 2006 UMC WITH HOUSTON AMENDMENTS TABLE 4-1 #EF-1 & WL-1

ROOM NAMES	AREA SF.	CFM/SF	CFM EA.	TOTAL
WAREHOUSE	8,520	1.0		8,520.0 CFM
TOTAL REQUIRED				8,520.0 CFM
TOTAL PROVIDED				8,847.0 CFM

EXHAUST FAN SCHEDULE

MARK	EF2,3,4		
SERVE	RESTROOMS		
CFM	50		
SONES	1.7		
VOLT/PH/HZ	120/1/60		
MANUFACTURER	BROAN		
MODEL NO.	XB50		
NOTES	1		

NOTES:

- M/C TO PROVIDE WALL CAP, BIRDSCREEN, AND BACKDRAFT DAMPER.

AIR CONDITIONING EQUIPMENT SCHEDULE

QTY	MARK	DESCRIPTION	TYPE	MFR	CFM	HEATER(KW)	SEER
1	4 TON ACCU & AHU	SPLIT SYSTEM	AIR COOLED	GOODMAN OR EQUAL	1600	15.0	13.0

T THERMOSTATS (1)- PROGRAMMABLE SINGLE STAGE HEAT, COOL WITH LOCK BOX & DUCT LIMITER, OCCUPANT SENSORS, SEVEN DAY PROGRAMMABLE SCHEDULE ADJUSTMENT AUTOMATIC OFF HOUR CONTROL.
310.2.1 - 2006 UMC WATER-LEVEL SENSING DEVICES. ON UNITS AND OTHER COILS ON A ROOF OR ABOVE A CEILING THAT DO NOT HAVE A SECONDARY DRAIN OR MEANS TO INSTALL A SECONDARY DRAIN PAN, A WATER LEVEL SENSING DEVICE SHALL BE INSTALLED INSIDE A PRIMARY DRAIN PAN. THIS DEVICE SHALL SHUT OFF THE APPLIANCE IN THE EVENT THAT THE PRIMARY DRAIN BECOMES RESTRICTED. INLINE OVERFLOW DEVICE INSTALLED IN THE PRIMARY DRAIN LINE SHALL NOT BE PERMITTED.

EF-1:

DAYTON MODEL 7AD36, 30" WALL EXHAUST FAN WITH AUTOMATIC SHUTTER, 8,847 CFM @ 3/8" S.P., 1 HP MOTOR, 240V, 3PH., ROUGH IN DIMENSIONS-34-1/2" x 34-1/2" BOTTOM OF OPENING @ 10'-0" A.F.F.

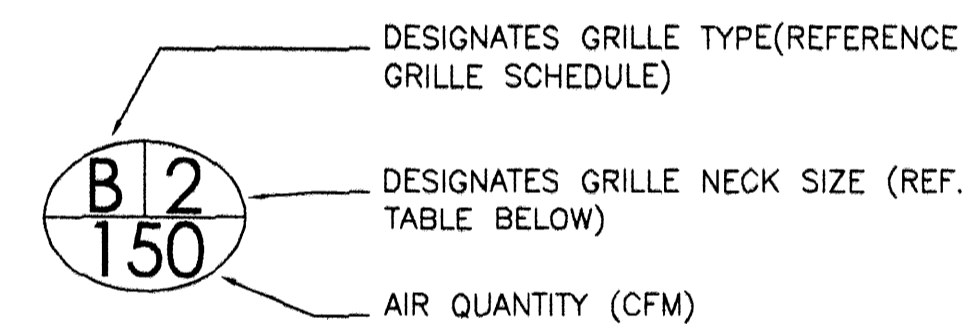
WL-1:

48" X 48" X 4" UNITED ENERTECH #SAFL-D-4 ADJUSTABLE/DRAINABLE WALL STEEL LOUVER WITH BIRDSCREEN BOTTOM OF OPENING AT 10'-0" A.F.F.

AIR DEVICE SCHEDULE

MARK	MFR. AND CAT. No.	MOUNTING	PATTERN	REMARKS
A	TITUS #TDC-6,8,10-24x24-3-4-26	LAY-IN	SUPPLY	ALL-WHITE FINISH
B	TITUS #TDC-8-24x24-3-4-26	LAY-IN	SUPPLY	ALL-WHITE FINISH
C	TITUS #TDC-10-24x24-3-4-26	LAY-IN	SUPPLY	ALL-WHITE FINISH
D	TITUS #4FS-48x30-1-26-0BD	SURFACE	SUPPLY	ALL-WHITE FINISH
E	TITUS #4FS-48x36-1-26-0BD	SURFACE	SUPPLY	ALL-WHITE FINISH
F	TITUS #8R-12x6-1-0BD	SURFACE	EXHAUST	ALL-WHITE FINISH, OBD
G	TITUS #TDC-15x15-24x24-3-4-26	LAY-IN	RETURN	ALL-WHITE FINISH
H	TITUS #TDB-10-48-1HP-**-1 1/2-02-3	LAY-IN	SUPPLY	SLOT DIFFUSER, BLACK FINISH
K	TITUS #TDC-AA-18x18-24x24-3-3-26	LAY-IN	3-WAY	ALUM. CONSTRUCTION (MRI)
L	TITUS #4FS-10x18-1-26-0BD	SEAWALL	RETURN	ALL WHITE FINISH, OBD
M	TITUS #STERITEC-SS-8x8	FLANGE	SUPPLY	STAINLESS STEEL
N	TITUS #4FS-10x24-1-26-0BD	SEAWALL	RETURN	ALL-WHITE FINISH, OBD
P	TITUS #TBD-30-48-1-8-1-02	LAY-IN	SUPPLY	SLOT DIFFUSER, BLACK FINISH
Q	TITUS #8R-8x8-1-26	SURFACE	EXHAUST	ALL-WHITE FINISH
R	TITUS #TDC-15x15-24x24-1-4-26-AG35	SURFACE	RETURN	ALL-WHITE FINISH, OBD
S	TITUS #TDC-AA-18x18-24x24-3-4-26	LAY-IN	RETURN	ALL-WHITE FINISH, MRI
T	TITUS #300RL-18x6-1-26-0BD	SEAWALL	SUPPLY	ALL-WHITE FINISH, OBD
U	TITUS #300RL-12x8-1-26-0BD	SEAWALL	SUPPLY	ALL-WHITE FINISH, OBD
V	TITUS #TDC-15x15-24x24-3-4-26	LAY-IN	RETURN	ALL-WHITE FINISH
W	TITUS #PAS-10-24x24-3-26	LAY-IN	SUPPLY	ALL-WHITE FINISH
Y	TITUS #PAR-18x18-24x24-3-26	LAY-IN	RETURN	ALL-WHITE FINISH

Air Device Sizing Schedule



GRILLE SIZE DESIGNATION	NECK SIZE	
	NECK SIZE	NECK SIZE
1	6 x 6	6"ø
2	8 x 8	8"ø
3	9 x 9	10"ø
4	12 x 12	12"ø
5	14 x 14	12"ø
6	15 x 15	14"ø
7	18 x 18	16"ø

- GRILLE NECK SIZE SHOWN ADJACENT TO GRILLE WHEN NO DESIGNATION SHOWN.
- ALL GRILLES SHALL BE FOUR-WAY THROW UNLESS SHOWN OTHERWISE.
- NECK SIZE IS FOR ADAPTER TO LISTED DIFFUSER NECK SIZE.

Flexible Duct Sizing

CFM RANGE	FLEX. DUCT SIZE
0 - 125	6"ø
126 - 225	8"ø
226 - 350	10"ø
351 - 550	12"ø
551 - 900	14"ø
901 - 1400	16"ø

ENERGY CODE COMPLIANCE NOTES:

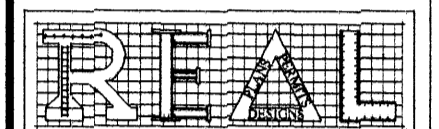
- ENERGY CODE - COMPLETION REQUIREMENTS THE FOLLOWING REQUIREMENTS ARE MANDATORY PROVISIONS AND ARE NECESSARY FOR COMPLIANCE WITH THE CODE. DRAWINGS/ CONSTRUCTION DOCUMENTS SHALL REQUIRE THAT WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE RECORD DRAWINGS OF THE ACTUAL INSTALLATION BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER. RECORD DRAWINGS SHALL INCLUDE AS A MINIMUM THE LOCATION AND PERFORMANCE DATA ON EACH PIECE OF EQUIPMENT, GENERAL CONFIGURATION OF DUCT AND PIPE DISTRIBUTION SYSTEM INCLUDING SIZES, AND THE TERMINAL AIR OR WATER DESIGN FLOW RATES. MANUALS/ CONSTRUCTION DOCUMENTS SHALL REQUIRE THAT AN OPERATING MANUAL AND A MAINTENANCE MANUAL BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE. THESE MANUALS SHALL BE IN ACCORDANCE WITH INDUSTRY-ACCEPTED STANDARDS (SEE APPENDIX E) AND SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING: (A) SUBMITTAL DATA STATING EQUIPMENT SIZE AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. (B) OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, EXCEPT EQUIPMENT NOT FURNISHED AS PART OF THE PROJECT. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED. (C) NAMES AND ADDRESSES OF AT LEAST ONE SERVICE AGENCY. (D) HVAC CONTROLS SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD-DETERMINED SET-POINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS AT CONTROL DEVICES OR, FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS. (E) A COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING SUGGESTED SET-POINTS. SECTION 6.7.2 - 2008 HOUSTON COMMERCIAL ENERGY CONSERVATION CODE.
- ENERGY CODE - AUTOMATIC SHUTDOWN HVAC SYSTEMS SHALL BE EQUIPPED WITH AT LEAST ONE OF THE FOLLOWING: (A) CONTROLS THAT CAN START AND STOP THE SYSTEM UNDER DIFFERENT TIME SCHEDULES FOR SEVEN DIFFERENT DAY TYPES PER WEEK, ARE CAPABLE OF RETAINING PROGRAMMING AND TIME SETTING DURING LOSS OF POWER FOR A PERIOD OF AT LEAST 10 HOURS, AND INCLUDE AN ACCESSIBLE MANUAL OVERRIDE, OR EQUIVALENT FUNCTION, THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO TWO HOURS.
- ENERGY CODE - DUCT SEALING DUCTWORK AND PLENUMS SHALL BE SEALED IN ACCORDANCE WITH THE MECHANICAL CODE AND SMACNA METHOD 6.4.4.2.1 - 2008 HOUSTON COMMERCIAL ENERGY CONSERVATION CODE.
- ENERGY CODE - INSULATION (DUCT AND PLENUM) ALL SUPPLY AND RETURN DUCTS AND PLENUMS INSTALLED AS PART OF AN HVAC AIR DISTRIBUTION SYSTEM SHALL BE THERMALLY INSULATED IN ACCORDANCE WITH THE TABLE 6.4.4.1.1 EXCEPT: FACTORY-INSTALLED PLENUMS, CASINGS, OR DUCTWORK FURNISHED AS A PART OF HVAC EQUIPMENT TESTED AND RATED IN ACCORDANCE WITH 6.4.1. SECTION 6.4.4.1.2 - 2008 HOUSTON COMMERCIAL ENERGY CONSERVATION CODE.

APPROVED HVAC PLAN

HIS PLAN MUST BE KEPT ON JOB FOR ALL CITY INSPECTORS. SEPARATE PERMIT IS REQUIRED FOR HVAC.

NO. 395
#15034588
4/17/15

NO.	DATE	DESCRIPTION
1		
2		



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OWNER:

TRUCK SALES

PROPOSED
METAL BUILDING
FOR OFFICE WAREHOUSE
LOCATED AT
10038 GROVER LANE
HOUSTON, TEXAS 77041

DRAWING TITLE:

MECHANICAL SCHEDULES

DATE:

12-03-14

DESIGN:

8530

DRAWN:

8530

SCALE:

NO SCALE

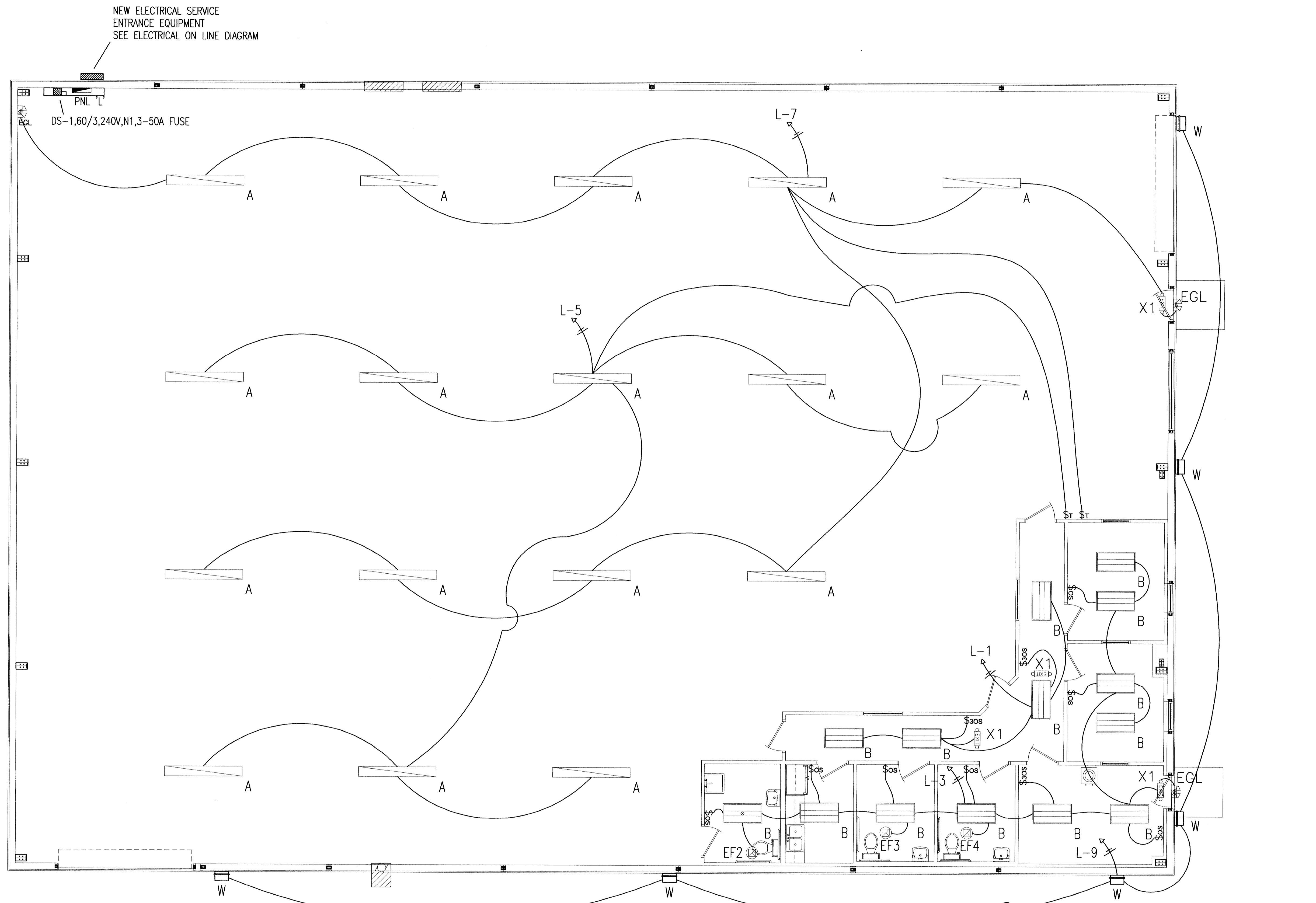
JOB No:

14093033

FILE:

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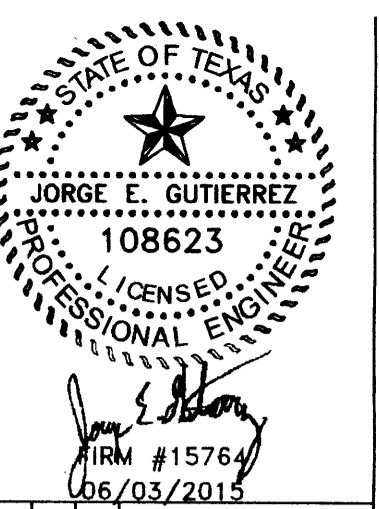
DRAWING



APPROVED
ELECTRICAL PLAN
 PLANS AND SPECIFICATIONS TO BE IN ACCORDANCE WITH CURRENT NATIONAL ELECT. CODE & CITY BUILDING CODE. THIS PLAN SHALL BE KEPT ON JOB FOR INSPECTORS. SEPARATE PERMIT FOR ELECTRICAL REQUIRED.
NO. 385

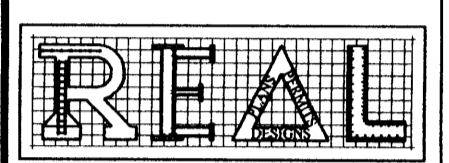
01 JUL 2015

NOTES:
 ALL WALL PAK EXTERIOR LIGHT FIXTURES ARE EQUIPPED WITH INTEGRAL PHOTOCELL.



REVISIONS	DESCRIPTION
No.	DATE
1	
2	

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PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:

ELECTRICAL LUMINARIES PLAN

DATE: 12-03-14

DESIGN: 8613

DRAWN: 8613

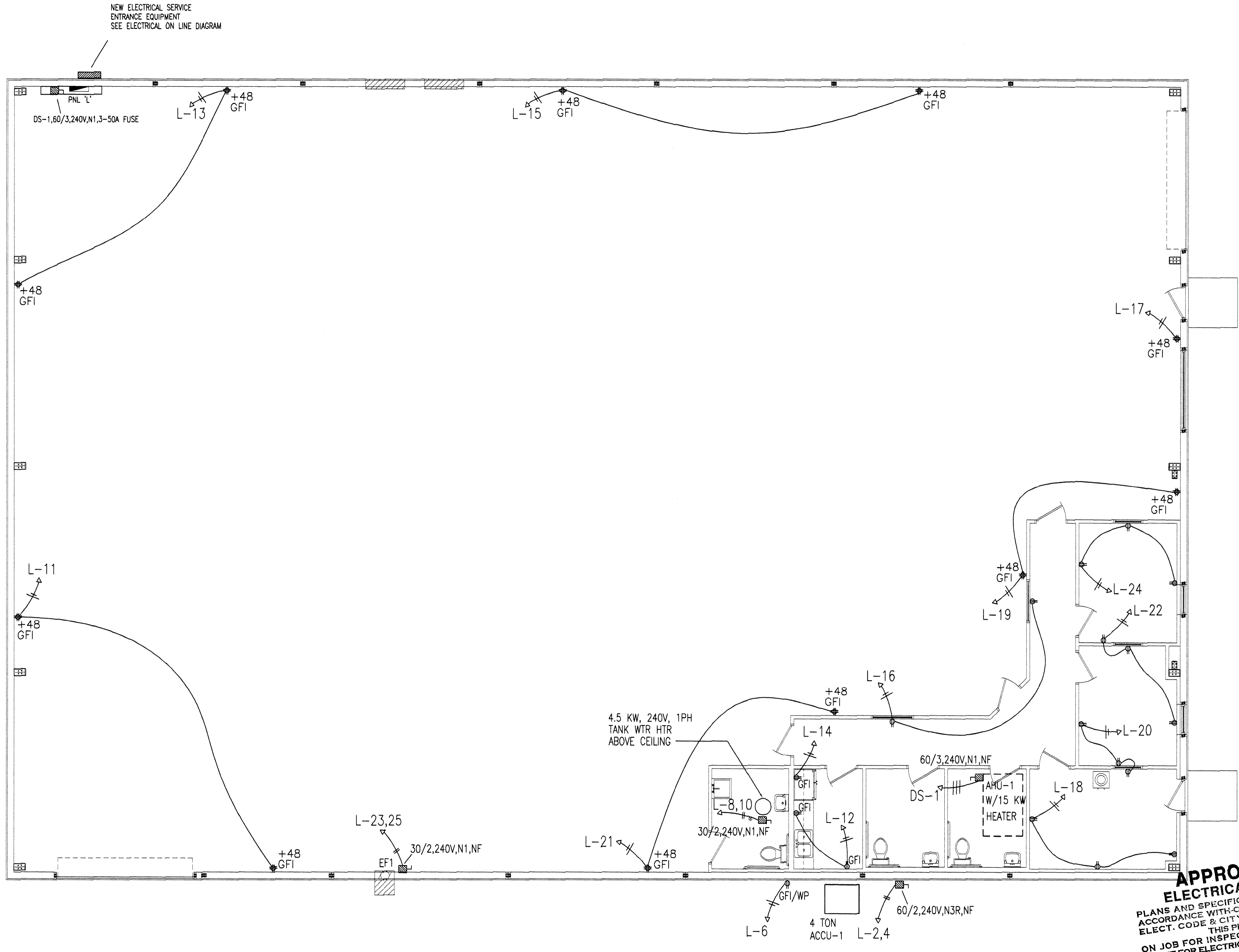
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JOB No: 14093033

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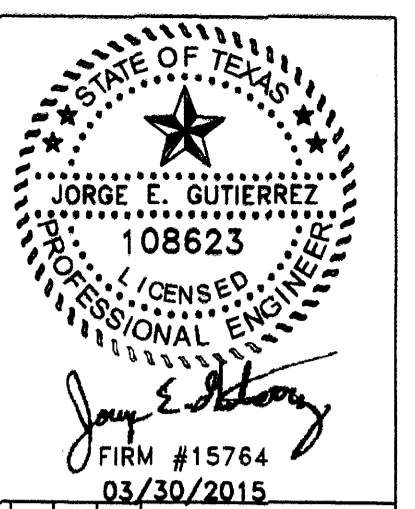
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DRAWING



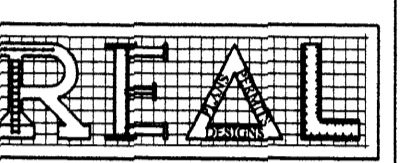
**APPROVED
ELECTRICAL PLAN**
 PLANS AND SPECIFICATIONS TO BE IN ACCORDANCE WITH CURRENT NATIONAL ELECT. CODE & CITY BUILDING CODE. THIS PLAN SHALL BE KEPT ON JOB FOR INSPECTORS. SEPARATE PERMIT FOR ELECTRICAL REQUIRED.
NO. 385

01 JUL 2015



REVISIONS	DESCRIPTION
No. 1	DATE
No. 2	DATE

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**TRUCK
SALES**

**PROPOSED
METAL BUILDING
FOR OFFICE WAREHOUSE
LOCATED AT
10038 GROVER LANE
HOUSTON, TEXAS 77041**

DRAWING TITLE:

**ELECTRICAL
POWER
PLAN**

DATE: 12-03-14

DESIGN: 8613

DRAWN: 8613

SCALE: 3/16" = 1'-0"

JOB No: 14093033

FILE:

F:\REAL\2014\14093033\10038 GROVER LINELECT

DRAWING

ELECTRICAL SPECIFICATIONS

16.0-ELECTRICAL SPECIFICATIONS-

16.1-PERMITS AND OBLIGATIONS-electrical contractor(e/c) shall obtain and pay for all electrical permits as required by the city of houston, tx for the office/warehouse located at 10038 GROVER LANE houston, tx 77041.

16.2-E/C shall provide all electrical materials shown on the electrical plans for this project and all incidental items to allow for complete and properly operating electrical systems at final electrical inspection by the city of houston, tx

16.3-WARRANTY-the E/C shall warranty all electrical contracting work for a period of one(1) year, referenced to the date recorded on the certificate of occupancy-issued by the city of houston, tx.

16.4-GOVERNING ELECTRICAL CODES :
THESE ELECTRICAL CODES SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, THE FOLLOWING :
16.4.1-CITY OF HOUSTON ELECTRICAL ORDINANCE
16.4.2-EDITION OF THE NEC CURRENTLY BEING ENFORCED BY THE CITY OF HOUSTON, TX.
16.4.3-CENTERPOINT POWER CO. SERVICE STANDARDS.
16.4.4-ELECTRICAL REQUIREMENTS FOR THE HANDICAPPED INDIVIDUALS AS IDENTIFIED IN THE AMERICAN DISABILITY ACT.

16.5-WIRING/CONDUCTORS-EXCEPTING CONTROL WIRE, ALL MAIN SERVICE AND BRANCH CIRCUIT WIRE SHALL BE DUAL RATED, TYPE THHN/THWN(COPPER), MTW.

16.6-CONDUIT REQUIREMENTS-SHALL BE AS FOLLOWS :

- 16.6.1-INSIDE BUILDING-EMT WITH SET SCREW FITTINGS
- 16.6.2-OUTSIDE BUILDING-EMT WITH WEATHERPROOF(WP) FITTINGS
- 16.6.3-UNDERGROUND-SCHEDULE 40 PVC OR RGC

16.6.4-MAIN SERVICE CONDUIT(WHEN APPLICABLE) SHALL BE AS FOLLOWS :
16.6.4.1-UP POWER COMPANY POLE-PER CENTERPOINT UTILITY/CITY OF HOUSTON-PVC(80)RGC
16.6.4.2-UNDERGROUND-SCHEDULE 40 PVC AND PER SERVING UTILITY/CITY OF HOUSTON

16.7-WIRING JUNCTION BOXES, LIGHT SWITCHES, RECEPTACLE BOXES-STEEL CITY, BOWERS OR EQUAL..

16.8-LIGHT FIXTURES-AS SHOWN ON ELECTRICAL PLANS OR EQUAL APPROVED BY RESPONSIBLE ENGINEER AND ARCHITECT.

16.8.1-LIGHT FIXTURE SUPPORT CLIPS SHALL BE PROVIDED AND INSTALLED AS NOTED AND REQUIRED PER THE LIGHT FIXTURE SCHEDULE FOR THIS PROJECT.

16.9-RECEPTACLES, LIGHT SWITCHES-LEVITON, GE, HUBBELL, ARROWHART, EAGLE OR EQUAL.

16.10-ELECTRICAL PANELS, LOADCENTERS, DISCONNECTS AND OTHER SWITCHGEAR ITEMS SHALL BE GE, ITE, SQ D, CUTLER HAMMER, WESTINGHOUSE OR EQUAL.

16.11-INDIVIDUAL RECEPTACLE/BREAKER RATING-SHALL BE SUCH THAT THE AMPERE RATING OF THE CIRCUIT BREAKER SHALL NOT EXCEED THE AMPERE RATING OF EACH INDIVIDUAL RECEPTACLE.

16.12-ELECTRICAL CONTRACTOR(E/C) SHALL COORDINATE AND MAKE FINANCIAL ARRANGEMENTS FOR CONDUIT AND BOXES ROUGH-IN FOR FIRE ALARM AND OTHER SPECIALTY SYSTEMS FOR THIS PROJECT.

16.13-PTAC NOTE: ALL NEW SINGLE PHASE P-TAC RATED AT 250V OR LESS WITH AFCI PROTECTION SHALL BE AN INTEGRAL PART OF THE ATTACHMENT PLUG OR BE LOCATED IN THE POWER SUPPLY CORD WITH 12IN OF THE ATTACHMENT PLUG.

16.14-ANY CONFLICTS BETWEEN PLANS AND SPECIFICATIONS SHALL BE PRESENTED TO THE ARCHITECT AND ENGINEER AND RESOLVED PRIOR TO COMMENCING ANY ELECTRICAL CONTRACTING WORK.
END OF ELECTRICAL SPECIFICATIONS

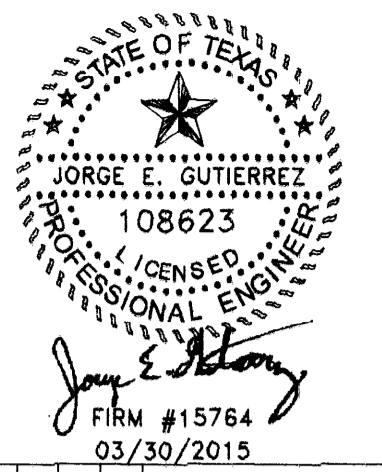
ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	A --- 1x8 RECESSED FLUORESCENT LIGHT FIXTURE SEE LIGHT FIXTURE SCHEDULE
	B --- RECESSED FLUORESCENT LIGHT FIXTURE SEE LIGHT FIXTURE SCHEDULE
	C --- SURFACE MOUNTED INCANDESCENT DOWN LIGHT FIXTURE SEE LIGHT FIXTURE SCHEDULE
	EGL --- EMERGENCY EGRESS LIGHT FIXTURE SEE LIGHT FIXTURE SCHEDULE
	X1 --- UNIVERSAL EXIT LIGHT FIXTURE WITH BATTERY BACK-UP-SEE LIGHT FIXTURE SCHEDULE
	SD --- SMOKE DETECTOR (120VAC)
	18" --- TELEPHONE/DATA CONNECTION-MT 18" AFF
	48" --- TELEPHONE/DATA CONNECTION-MT 48" AFF
	--- EXHAUST FAN (RR)/MOTOR
	--- DUPLEX RECEPTACLE-MT 18" AFF-20A,125VAC
	--- 20A,208V RECEPTACLE
	GFI --- GFI RECEPTACLE-MT 18" AFF CIRCUIT, 20A,125VAC
	IG --- RECEPTACLE ON ISOLATED GROUND
	T --- SINGLE POLE-120/277V-MT 48" AFF (INTERMATIC#FF12HC)
	3T --- INTERMATIC#FF312H, AUTO SHUT-OFF, THREE WAY 12 HR, 20A, 120/277V, SPRING WOUND TIMER/SWITCH, MT 48" AFF
	4 --- FOUR WAY SWITCH-MT 48" AFF
	SVC --- ELECTRICAL SERVICE
	D1 --- 600W, 120V INCANDESCENT DIMMER
	D2 --- 1000W, 120V INCANDESCENT DIMMER
	NL --- NIGHT LIGHT FIXTURE, CONTINUOUSLY ENERGIZED
	OS --- OCCUPANCY LIGHT/MOTION SENSOR (MFR-P&S#WSP200-W),120/277V
	--- INTERMATIC #K41211800W,120V PHOTOCCELL
	--- LEVITON #0DCOS-11000W INC,1000VA FLU,120V SELF-CONTAINED COMMERCIAL GRADE CEILING MOUNT OCCUPANT SENSOR
	--- 20A,120/277V SW IN REC/SW BOX W/ SW COVER
	WP --- 20A,120/277V SW IN WEATHER-PROOF BOX W/ FLID LID COVER

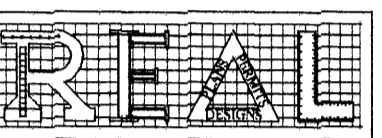
LUMINARIES SCHEDULE

LIGHT FIXTURE SCHEDULE-

TYPE	DESCRIPTION
A	----metalux#SSF296T8H0-UNV-EB81--8' strip fluorescent fixture, 296t8ho es lamps, 120/277V es ballast. Mounted 12' A.F.F.
B	----METALUX #2GC8-232A-UNV-EB81-U-2X4 LAYIN, T8 TROFFER LIGHT FIXTURE, WITH 2-32WT8 X 4' FLUORESCENT LAMPS, 120/277V BALLAST(UNV).
EGL	---emergency egress light fixture with battery back-up- surelite#umb-1 incandescent light fixture, 120/277v ballast, universal mount, approved for wet locations, 2-8W incandescent sealed beam lamps and 90 minute lead calcium battery backup.
W	----lumark# mhw1-100--mt-pc, wal pak with 100w metal halide lamp, multi-top ballast and integral photocell. mt 2' below top edge of building wall.
X1	----surelite# UNH-1-SRWDH-dual voltage 120/277V, universal mount (wall/ceiling/end mount)-exit light fixture with battery backup, red letters on white background, 2-20W, T6-1/2 intermediate base lamps and sealed lead calcium battery.



REVISIONS	DESCRIPTION
No.	DATE
1	
2	



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OWNER:

TRUCK SALES

PROPOSED
 METAL BUILDING
 FOR OFFICE WAREHOUSE
 LOCATED AT
 10038 GROVER LANE
 HOUSTON, TEXAS 77041

DRAWING TITLE:

ELECTRICAL SCHEDULES

DATE: 12-03-14

DESIGN: 8613

DRAWN: 8613

SCALE: NO SCALE

JOB No: 14093033

FILE:

F:\REAL\001414003033\10038 GROVER LANE\ELECT

DRAWING: E1.3

**APPROVED
ELECTRICAL PLAN**
PLANS AND SPECIFICATIONS TO BE IN ACCORDANCE WITH-CURRENT NATIONAL ELECT. CODE & CITY BUILDING CODE. THIS PLAN SHALL BE KEPT ON JOB FOR INSPECTORS. SEPARATE PERMIT FOR ELECTRICAL REQUIRED.
NO. 385

01 JUL 2015

ELECTRICAL LOAD ANALYSIS

OFFICE/WAREHOUSE :

- WAREHOUSE LIGHTING-8,520 SFx0.5W/SFx125%-----= 5,325 W
- OFFICE LIGHTING-1,080 SFx3.5W/SFx125%-----= 4,725 W
- EXTERIOR LIGHTING-(6) 100W X 125%-----= 750 W
- RECEPTACLES-39 @ 180W-----= 7,020 W
- HW HTR---1 @ 4.5KW,240V,1PH X 100%-----= 5,625 W
- 1 PH MOTOR---1@1HP,240V,1PH-----= 1,920 W
- HVAC HEAT>AC 1 @ 15KW,240V,1PH X 100%-----= -0-
- 25% OF LARGEST MOTOR---.25 X 1,920W-----= 480 W
- OTHER LOAD :
- SIGN-1 @ 10A,120V X 125%-----= 1,500 W
- REFRIGERATOR-1 @ 8A,120V-----= 960 W
- MISC-----= 5,000 W

SUBTOTAL CONNECTED LOAD-----= 32,225 W

SUMMARY AMPS @ 120/240V,3PH,4W

	PH A	PH B	PH C	N
WAREHOUSE LTG-----	22.2A	-0-	22.2A	22.2A
OFFICE LTG-----	19.7A	-0-	19.7A	19.7A
EXT. LTG-----	6.3A	-0-	6.3A	-0-
RECEPTACLES-----	29.3A	-0-	29.3A	29.3A
HW HTR-----	36.1A	-0-	36.1A	-0-
1PH MTR-----	8.0A	-0-	8.0A	-0-
25% LARGEST MTR---	2.0A	-0-	2.0A	-0-
OTHER LOAD :				
SIGN-----	-0-	-0-	12.5A	12.5A
REFRIGERATOR-----	8.0A	-0-	-0-	-0-
MISC-----	20.8A	-0-	20.8A	-0-

TOTAL CONNECTED LOAD AMPS:

	PH A	PH B	PH C	N
HI-LEG				
PH A	152.4A	36.1A	150.6A	90.0A

REFER TO ELECTRICAL ONE LINE DIAGRAM

ESTIMATED SHORT CIRCUIT/FAULT CURRENT CALCULATIONS

ASSUME 1-50KVA & 1-75KVA POLE MTD TRANSFORMERS (TO V.I.F. WITH POWER CONSULTANT)

ASSUME TRANSFORMER IMPEDANCE(Z) = 1.7%

ASSUME SVC VOLTAGE IS 120/240V, 3PH,4W WITH A "HI-LEG"

BANK KVA = 125KVA

FLA OF BANK = $125KVA / [240V \times 1.73] = 301.1$ AMPS

Isc @ LOADSIDE LUGS OF POLE MTD TRANSFORMERS, = $301.1A \times 100/Z = 301.1A \times 100/1.7 = 17,711.8$ RMS SYMMETRICAL AMPERES

Isc(1) @ SWITCHGEAR LOCATION(APPROX-100' DISTANCE), = $17,711.8 \times M$

WHERE $M = 1 / [1 + F2]$ AND $F2 = \frac{1.73 \times 100 \times 17,711.8}{2 \times 12,844 \times 240}$

$F2 = 0.50(r.o.)$

AND $M = 1 / [1 + F2] = 1 / [1.50] = 0.67(r.o.)$

Isc(1) @ SWITCHGEAR = $17,711.8 \times 0.67 = 11,867.0$ RMS SYMMETRICAL AMPERES

THEREFORE, THE ELECTRICAL PANELS, SWITCHGEAR, MAIN AND BRANCH BREAKERS SHALL HAVE AIC RATINGS AS FOLLOWS :

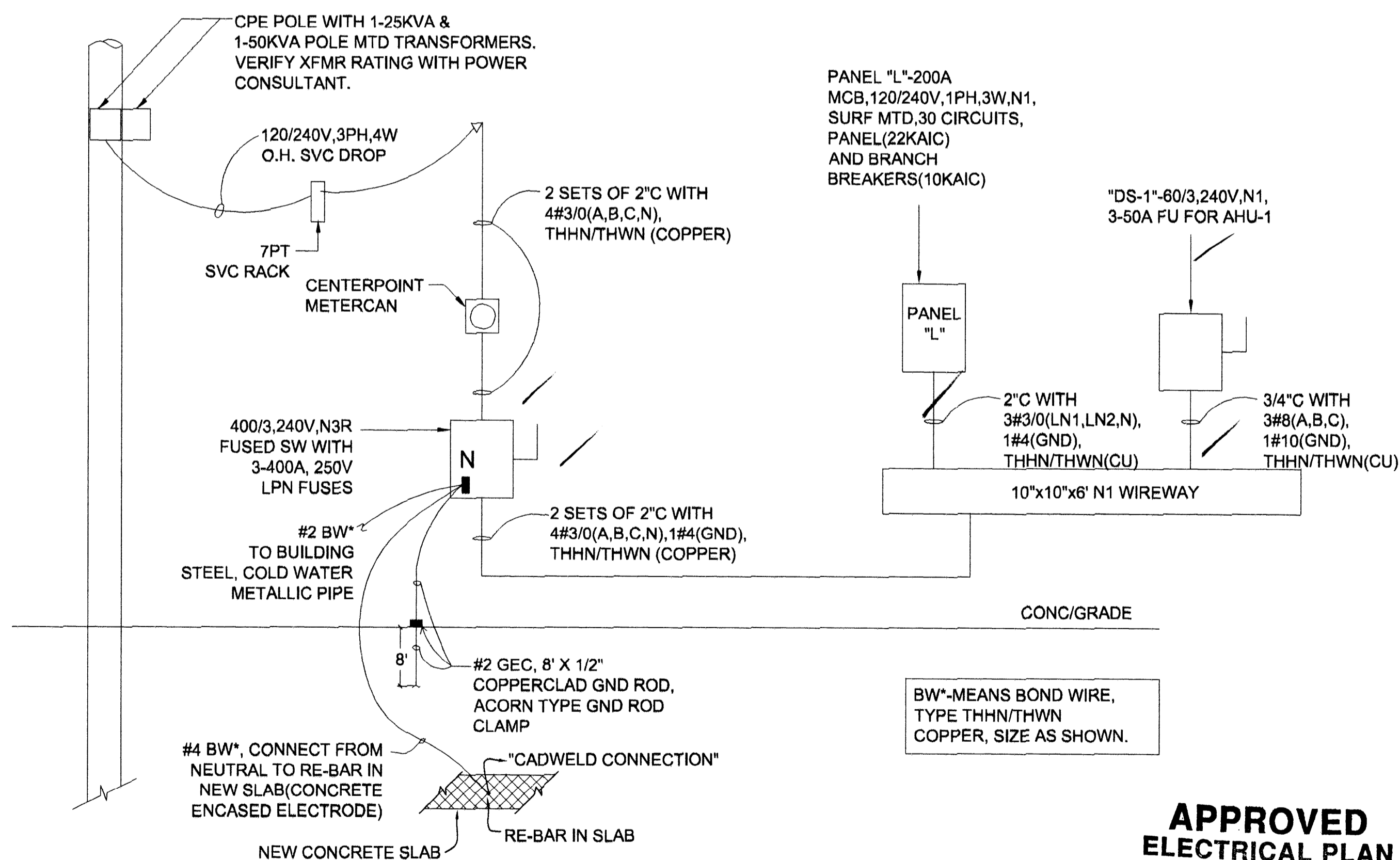
SWITCHGEAR FUSES(@240V) SHALL BE 22KAIC(MINIMUM)

PANELS MCB(@240V) SHALL BE 22KAIC(MINIMUM)
BRANCH BREAKERS SHALL BE 10KAIC(MINIMUM)

NOTE: AVAILABLE FAULT CURRENT LABELING, IN LIEU OF THE MAXIMUM AVAILABLE FAULT CURRENT MARKING AS REQUIRED BY NEC 110.24, A PERMANENTLY AFFIXED LABEL SHALL BE APPLIED WITH THE AVAILABLE FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE 2" X 3" IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. THIS LABEL SHALL ALSO INCLUDE THE DATE OF THE CALCULATION.

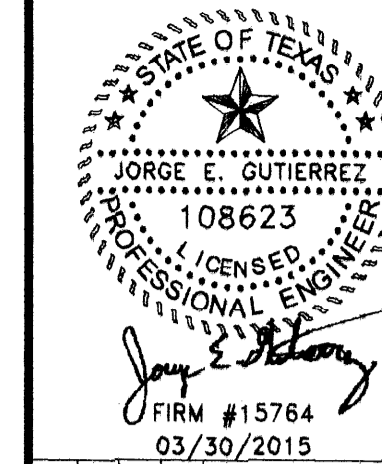
PANEL	"L"	MAIN BUSS: 200A	CONNECTED LOAD	VA	A
VOLTAGE	120/240V,1PH.,3W	FEED FROM:	LINE 1	13,440	112
MAIN	200AF,200/2 MCB	SVC SW	LINE 2	12,720	106
LOCATION	WAREHOUSE		TOTAL	26,160	
MTG./TYPE	SURFACE/N1				

CKT. NO.	W SIZE	LOAD DESCRIPTION	C/B	W SIZE	CKT. NO.	LOAD DESCRIPTION	C/B	W SIZE	CKT. NO.	LOAD	
1	12	LIGHTING - 376W	20	40	8	ACCU-1,28A,240V,1PH	20	8	2	31	
3	12	LIGHTING - 1048W	20	↓	8	2#8,1#10(G),3/4"C	20	8	4	31	
5	12	LIGHTING - 1456W	20	20	12	1 GFI/WP REC - 180W	20	12	6	16	
7	10	LIGHTING - 1710W	40	30	10	HW HTR,4.5KW,240V,1PH	20	10	8	33	
9	10	LIGHTING - 600W	40	↓	10	2#10,1#10(G),1/2"C	20	10	10	24	
11	12	2 QUADPLEX REC'S - 720W	20	20	12	2 GFI REC'S - 360W	20	12	12	9	
13	12	2 QUADPLEX REC'S - 720W	20	20	12	1 REFRIGERATOR - 960W	20	12	14	14	
15	12	2 QUADPLEX REC'S - 720W	20	20	12	2 REC'S - 360W	20	12	16	9	
17	12	1 QUADPLEX REC - 360W	20	20	12	3 REC'S - 540W	20	12	18	8	
19	12	2 QUADPLEX REC'S - 720W	20	20	12	3 REC'S - 540W	20	12	20	11	
21	12	2 QUADPLEX REC'S - 720W	20	20	12	3 REC'S - 540W	20	12	22	11	
23	12	EF-1,1HP,240V,1PH	20	20	12	3 REC'S - 540W	20	12	24	13	
25	12	2#12,1#12(G),1/2"C	↓	-	-	SPACE	-	-	26	8	
27	-	SPACE	-	-	-	SPACE	-	-	28	-	
29	-	SPACE	-	-	-	SPACE	-	-	30	-	
TOTAL LOAD IN kW/φ										13.44	12.72
TOTAL LOAD IN FLA/φ										112	106



APPROVED ELECTRICAL PLAN
PLANS AND SPECIFICATIONS TO BE IN ACCORDANCE WITH CURRENT NATIONAL ELECT. CODE & CITY BUILDING CODE. THIS PLAN SHALL BE KEPT ON JOB FOR INSPECTORS. SEPARATE PERMIT FOR ELECTRICAL REQUIRED.
NO. 385

01 JUL 2015



REVISIONS	DESCRIPTION	DATE
1		
2		



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OWNER:

TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:

ELECTRICAL ONE LINE DIAGRAM

DATE: 12-03-14

DESIGN: 8613

DRAWN: 8613

SCALE: NO SCALE

JOB No: 14093033

FILE:

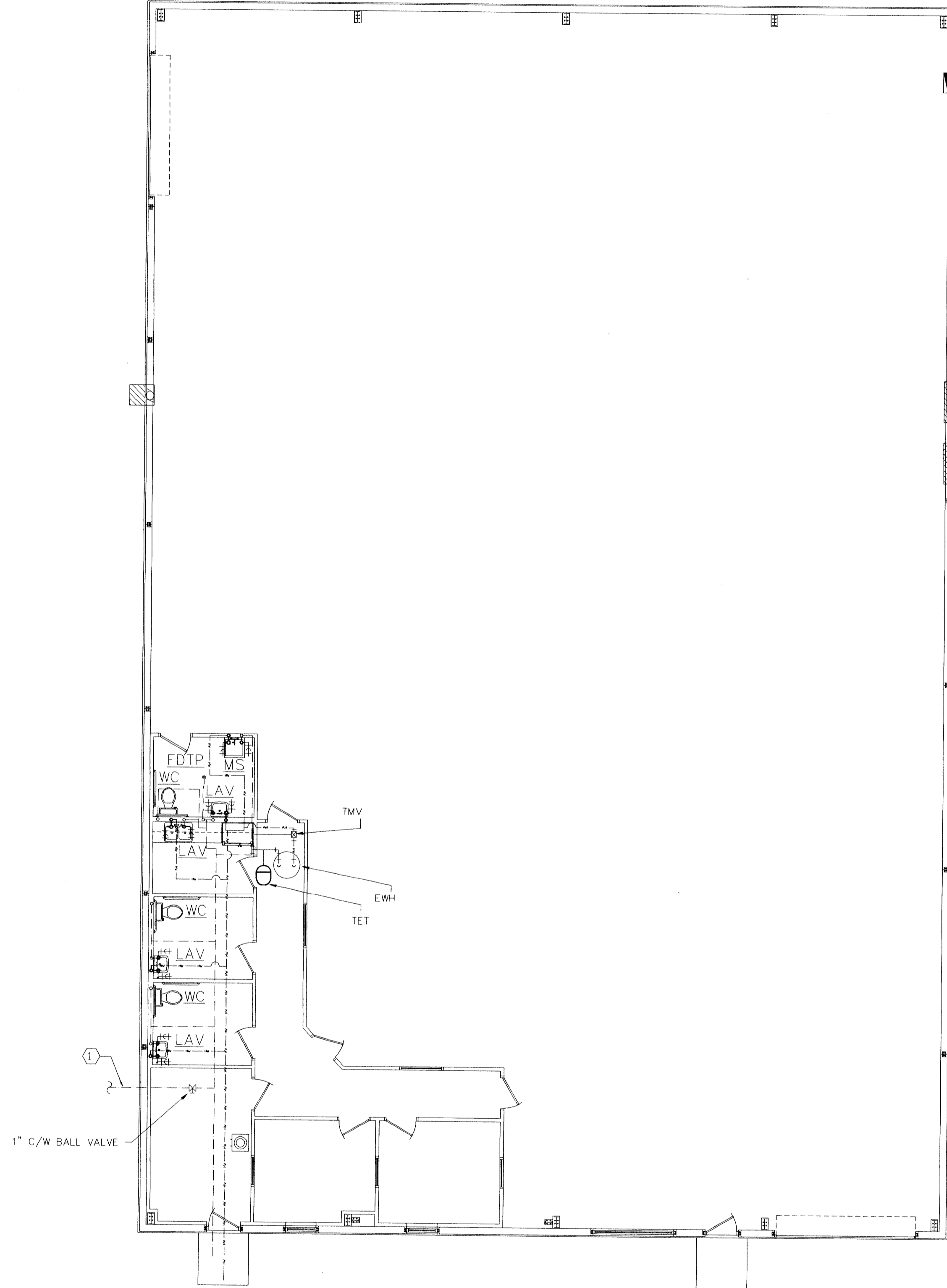
DRAWING

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E1.4

KEYED NOTE:

1 PROPOSED 2" BUILDING WATER LINE.(NOTE: CONTRACTOR TO VERIFY EXACT LOCATION OF BUILDING WATER LINE).



----- COLD WATER - COPPER TYPE "L"
 ----- 110 TEMP HOT WATER - COPPER TYPE "L"

PLUMBING PLAN- WATER

1/8"= 1'-0"

02

NOTE:

A THE OCCUPANT LOAD IS LESS THAN 30 THEREFORE NO DRINKING FOUNTAIN IS REQUIRED PER IBC '06 CHAPTER 29 SUFFIX "F". OWNER WILL PROVIDE A WATER BOTTLE COOLER DISPENSER IN THE FACILITY.

KEYED NOTE:
 2 COORDINATE LOCATION OF PROP. SANITARY SEWER LINE WITH EXISTING CONDITIONS. FIELD VERIFY LOCATION. CONNECT NEW SANITARY PIPING SERVICE SEWER TO PROP. (NOTE: CONTRACTOR TO VERIFY EXACT LOCATION OF MAIN SEWER LINE AND FLOW LINE).

APPROVED PLUMBING PLAN

IN ACCORDANCE WITH SECTION 102.2.6 OF THE UNIFORM PLUMBING CODE.

THIS PLAN MUST BE KEPT ON JOB FOR SEPARATE PERMIT FOR RECORD.

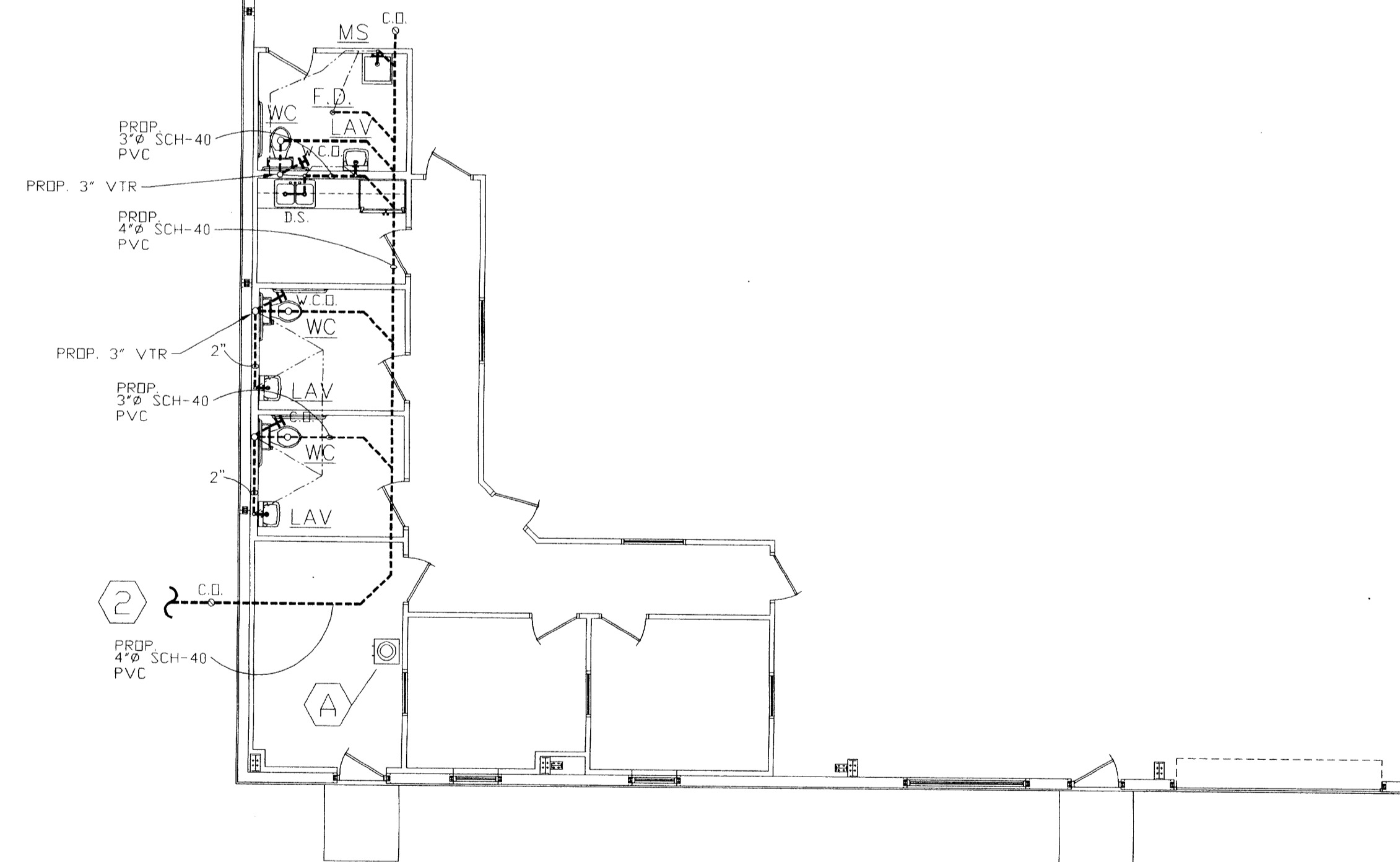
NO. 372

APPROVED PLUMBING PLAN

IN ACCORDANCE WITH SECTION 102.2.6 OF THE UNIFORM PLUMBING CODE.

THIS PLAN MUST BE KEPT ON JOB FOR SEPARATE PERMIT FOR RECORD.

NO. 372



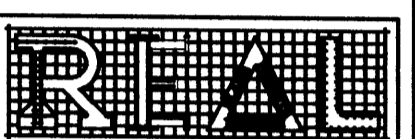
----- SANITARY SEWER - SCH 40 PVC
 ----- VENT PIPES - SCH 40 PVC

PLUMBING PLAN- WASTE WATER

1/8"= 1'-0"

01

NO.	DATE	DESCRIPTION
1		
2		



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OWNER:

TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:

PLUMBING PLAN

DATE: 03-15-15

DESIGN: 8519

DRAWN: 8519

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

JOB No: 14093033

FILE:

DRAWING

APPROVED PLUMBING PLAN
 15034586
 SUBJECT PROVISION OF SEC. 102.2.6 OF THE UNIFORM PLUMBING CODE.
 THIS PLAN MUST BE KEPT ON JOB FOR INSPECTORS. SEPARATE PERMIT FOR PLUMBING REQUIRED.
 06-24-15 NO. 372

P1.1

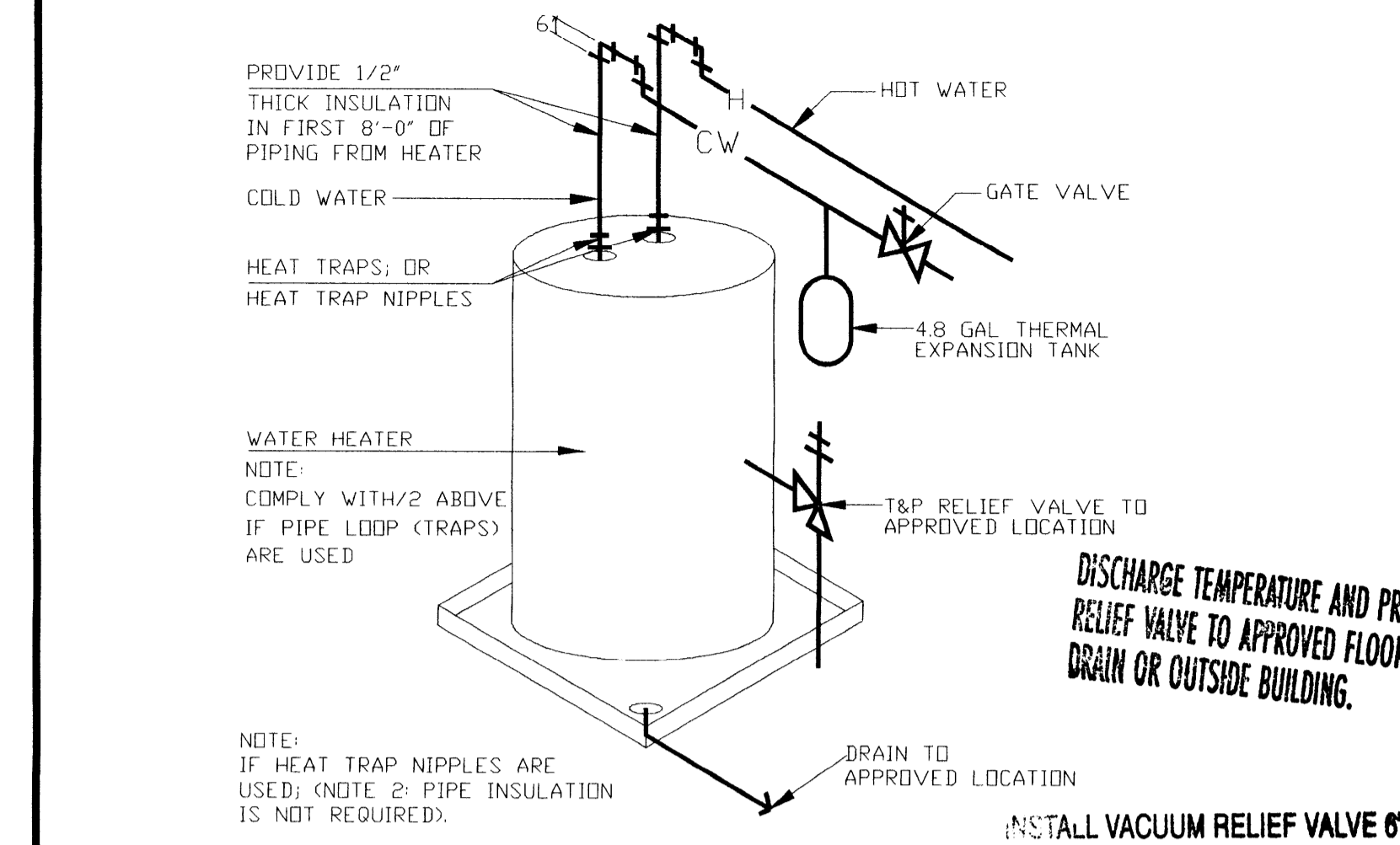
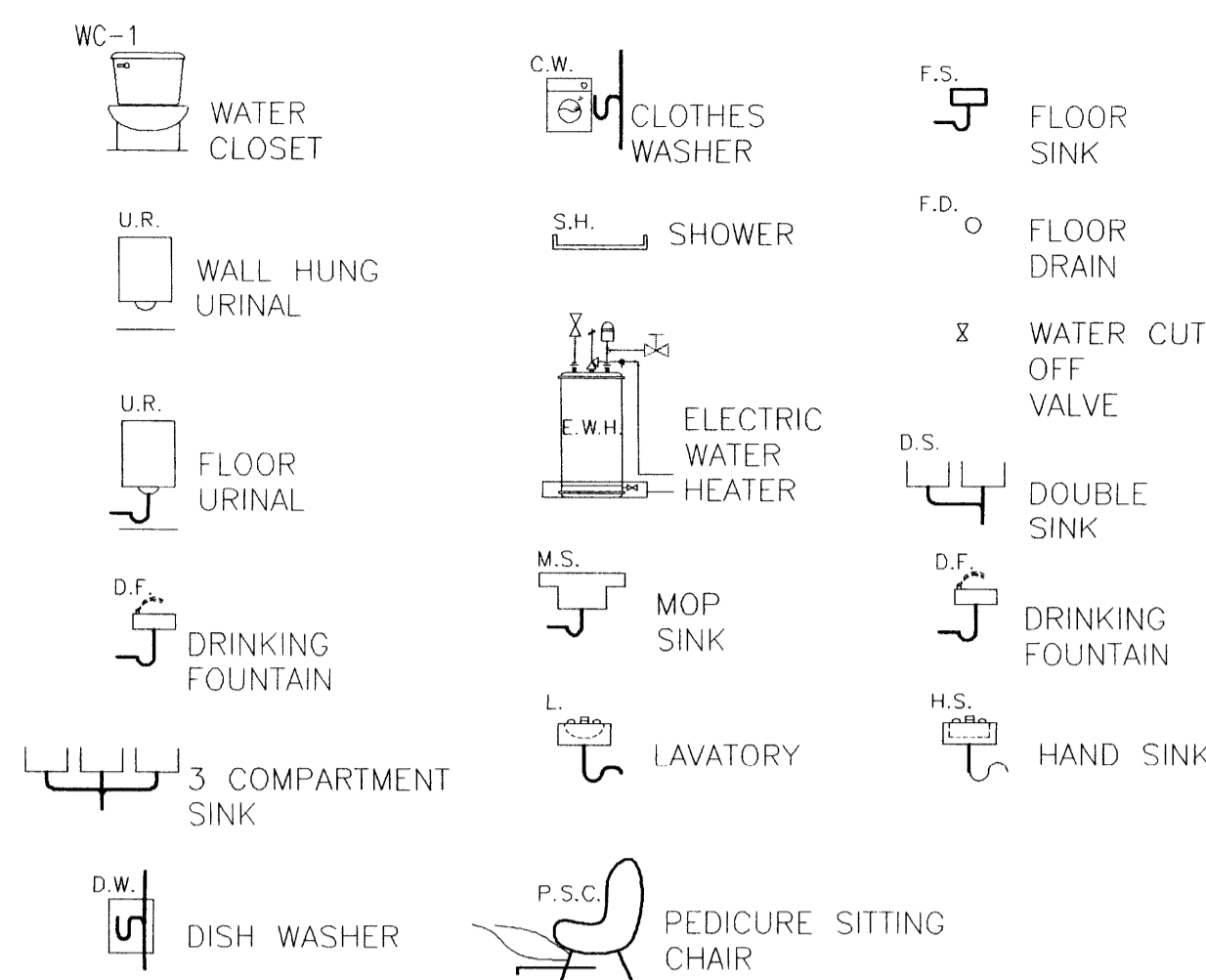
PLUMBING SPECIFICATIONS:

- WATER PIPING NOTES:**
1. WATER PIPING SHALL BE TYPE "L" COPPER, WITH 95-5 SILVER SOLDERED JOINTS.
 2. INSULATE ALL HOT AND COLD WATER PIPING WITH 1" RIGID FIBERGLASS OR 1/2" FLEXIBLE FOAM INSULATION (ARMAFLEX). FLEXIBLE FOAM INSULATION SHALL NOT BE SPLIT, AND SHALL BE TAPED AT THE BUTT JOINTS. SUPPLY DROPS IN WALLS DO NOT NEED INSULATION.
 3. PROVIDE EACH FIXTURE WITH STOPS AND SUPPLIES. EXPOSED STOPS SHALL BE CHROME PLATED WITH LOOSE KEY.
 4. PROVIDE WATER HAMMER PROTECTION AT EACH FIXTURE, OR GROUP OR SIMILAR FIXTURES.
 5. PROVIDE VACUUM BREAKERS AS REQUIRED BY UNIFORMED PLUMBING CODE.
 6. PROVIDE TRAP PRIMERS FOR AL FLOOR DRAINS. PRIMER SHALL BE LOCATED IN A SERVICEABLE LOCATION.

- SANITARY PIPING NOTES:**
1. SANITARY, WASTE AND VENT PIPING SHALL BE PVC UNLESS PROHIBITED BY THE LOCAL CODES.
 2. ROOF PENETRATIONS SHALL BE WITH LEAD PIPE ROOF JACKS. COORDINATE ROOF SYSTEM WITH GENERAL CONTRACTOR AND VERIFY WITH ARCHITECTURAL DRAWINGS. CONTRACTOR TO MINIMIZE ROOF PENETRATIONS.
 3. SLOPE OF SANITARY AND WASTE PIPING SHALL BE 1/4" PER FOOT MINIMUM FOR 3" PIPE AND MINIMUM OF 1/8" SLOPE FOR 4" PIPE.
 4. EXPOSED WASTE DRAINS, IN TOILETS, SHALL BE CHROME PLATED BRASS, WITH MATCHING STOPS AND ESCUTCHEONS.

- GAS PIPING NOTES:**
1. NATURAL GAS PIPING SHALL BLACK STEEL UNLESS PROHIBITED BY THE LOCAL CODES.
 2. THE PLUMBING CONTRACTOR TO ENSURE THE NATURAL GAS BLACK STEEL PIPE LINE INSTALLED OUTSIDE OF BUILDING ABOVE GRADE MUST BE PAINTED WITH AN APPROVED UV PROTECTION PAINT PRIOR TO BUILDING APPROVAL.

- GENERAL NOTE TO CONTRACTOR**
1. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH UNIFORM PLUMBING CODE AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
 2. THIS CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
 3. ALL COUNTER MOUNTED LAVATORIES TO HAVE INSULATION ON ALL EXPOSED PIPES PER A.D.A. REQUIREMENTS.
 4. ALL MATERIALS TO BE NEW AND OF COMMERCIAL QUALITY AND INSTALLATION TO BE WARRANTED BY PLUMBING CONTRACTOR.
 5. PLUMBING CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.



PLUMBING SYMBOLS

NO SCALE 04

ELECTRIC WATER HEATER DETAIL

NO SCALE 03

WATER SAVER STANDARDS

THE WATER SAVING PERFORMANCE STANDARDS FOR A PLUMBING FIXTURE ARE THOSE ESTABLISHED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), CURRENT REVISION, OR THE FOLLOWING STANDARDS, WHICHEVER ARE THE MORE RESTRICTIVE.

(1) THE MAXIMUM FLOW FROM A SINK OR LAVATORY FAUCET OR A FAUCET AERATOR SHALL NOT EXCEED 2.20 GALLONS OF WATER PER MINUTE AT A PRESSURE OR 60 POUNDS PER SQUARE INCH WHEN TESTED IN ACCORDANCE WITH ANSI TESTING PROCEDURES.

(2) THE MAXIMUM VOLUME OF WATER PER FLUSH FROM A TOILET SHALL NOT EXCEED AN AVERAGE OF 1.28 GALLONS WHEN TESTED IN ACCORDANCE WITH ANSI TESTING PROCEDURES.

(3) THE MAXIMUM VOLUME OF WATER PER FLUSH FROM A URINAL AND THE ASSOCIATED FLUSH VALVE, IF ANY, SHALL NOT EXCEED AN AVERAGE OF ONE GALLON WHEN TESTED IN ACCORDANCE WITH ANSI TESTING PROCEDURES.

PLUMBING MATERIAL LIST

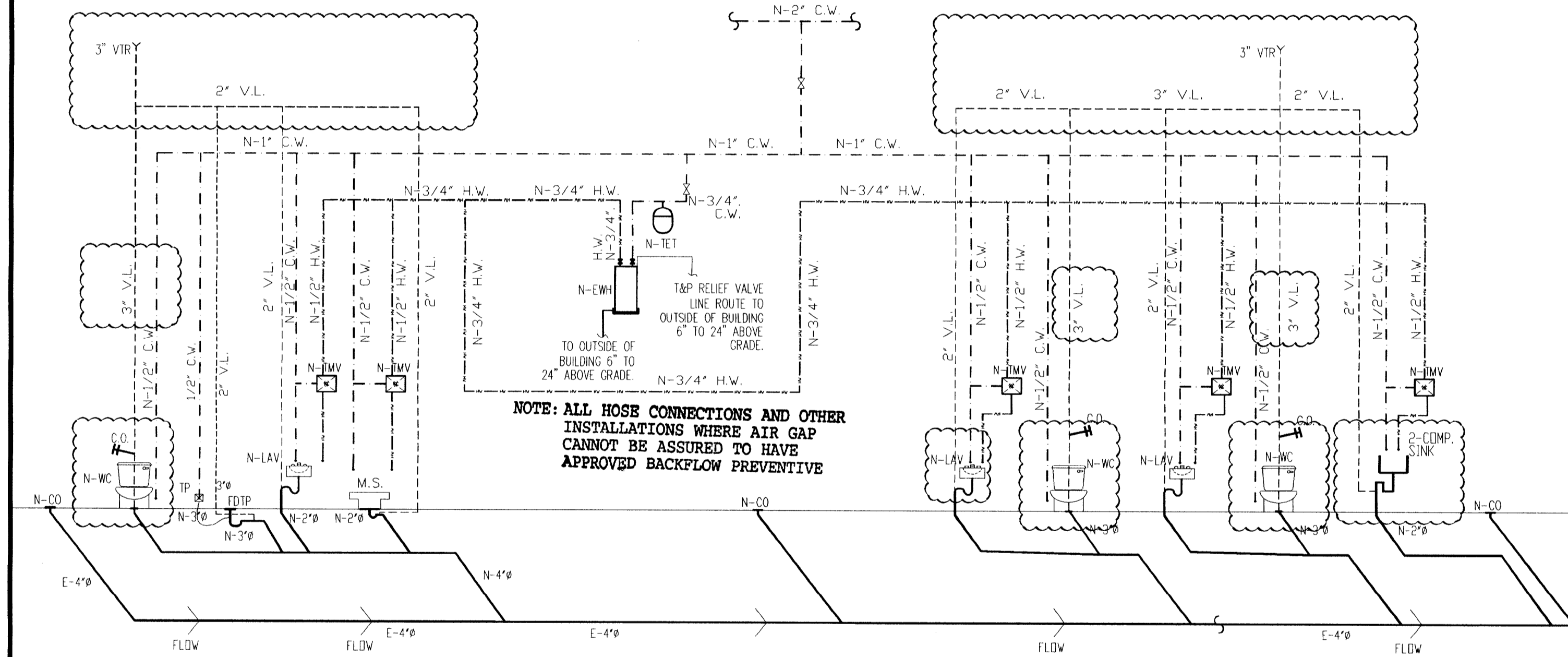
- MINIMUM STANDARDS:**
1. ALL UNDER GROUND WATER PIPING TO BE PVC SCHEDULE 40 WITH NO CONNECTIONS BELOW GRADE.
 2. ALL SANITARY SEWER PIPING AND VENTING TO BE PVC SCHEDULE 40. ALL CONNECTIONS TO BE PVC SCHEDULE 40. REFER TO PLUMBING SPECIFICATIONS.
 3. ALL WATER PIPING ABOVE GRADE TO BE TYPE "L" COPPER WITH COPPER FITTINGS.
 4. ALL VALVES TO BE IN-LINE GATE VALVES. SIZE ACCORDING TO WATER LINE SIZE.
 5. ALL WATER CLOSETS, URINALS AND LAVATORIES SHALL BE VITREOUS CHINA WITH WATER SAVER TYPE.
 6. ALL NATURAL GAS PIPING TO BE SCHEDULE 40 BLACK STEEL WITH SCREWED JOINTS. REFER TO PLUMBING SPECIFICATIONS.

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	SIZE OF CONNECTION					QTY.	REMARKS
		TRAP	SS	SV	CW	HW		
WC	ZURN-Z5535, ECOVANTAGE PRESSURE ASSISTED TWO-PIECE WATER CLOSET, HIGH EFFICIENCY TOILET, MAX. FLUSH 1.28 GPF, ELONGATED, SIPHON JET, VITREOUS CHINA, ADA HEIGHT, 3" FLUSH VALVE.	3"	4"	2"	1/2"	-	3	G/C FURNISHED EQUIPMENT. ROUGH-IN AND CONNECT.
EWH	RUUD - RUUD MODEL-ES50(A) - 50 GALLONS ELECTRIC WATER HEATER, 9KW, 208V, 3PH.	-	1"	-	3/4"	3/4"	1	G/C FURNISHED EQUIPMENT. ROUGH-IN AND CONNECT.
LAV	LAVATORY-ZURN Z5840- 20"x18" WALL HUNG ENAMEL CAST IRON LAVATORY WITH 4" CENTER FAUCET HOLES, HANGER PLATE AND Z8946-1-N.T. Z6915 SENSOR FAUCET AS PER ARCHITECT/OWNER'S SPECS.	1-1/4"	2"	2"	1/2"	1/2"	3	G/C FURNISHED EQUIPMENT. ROUGH-IN AND CONNECT.
TMV	WATTS, SERIES LFMVM THERMOSTATIC MIXING VALVE, US-M1, BRONZE BODY, STAINLESS STEEL PISTON AND LINER, CHECK VALVES SIZE PER PIPE CONNECTIONS. SEE ATTACHMENT FOR MANUFACTURER'S SPECS.	-	-	-	3/4"	3/4"	5	G/C FURNISHED EQUIPMENT. ROUGH-IN AND CONNECT.
MS	MOP SINK - FLORESTONE MODEL MSR-2424, 24"LX24"WX10"D FLOOR MOUNTED SINK WITH CHICAGO FAUCETS #445-L8CP WALL MOUNTED FAUCET WITH 8" CHROME PLATE SWING SPOUT AND LEVER HANDLES, AND WALL HANGER.	2"	2"	2"	1/2"	1/2"	1	G/C FURNISHED EQUIPMENT. ROUGH-IN AND CONNECT.
TEI	THERMAL EXPANSION TANK - ZORO- MODEL-FLEXCON #PH12 4.8 GAL TANK, 40PSI, 150PSI MAX., STEEL, NSF/IAPMO COMPLIANCE.	-	-	-	3/4"	-	1	G/C FURNISHED EQUIPMENT. ROUGH-IN AND CONNECT.
EDIP	FLOOR DRAIN - JAY R. SMITH FIG. 2005-A-03-PO50, CAST IRON BODY WITH 6" DIA. NICKLE-BRONZE STRAINER, WITH OVAL FUNNEL-CEPTOR AND TRAP PRIMER CONNECTION.	2"	3"	2"	1/2"	-	1	G/C FURNISHED EQUIPMENT. ROUGH-IN AND CONNECT.

GENERAL PLUMBING NOTES

1. CONDENSATE PIPING FOR ROOFTOP UNITS TO BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.
2. ALL HAND LAV'S AND THREE COMPARTMENT SINKS TO BE SUPPLIED AND INSTALLED BY KITCHEN VENDOR. PLUMBING CONTRACTOR TO MAKE FINAL CONNECTIONS. REFER TO KITCHEN DRAWINGS FOR SIZES OF EQUIPMENT AND CONNECTION SIZES.
3. ALL INDIRECT WASTE LINES TO BE FASTEN TO ADJACENT WALL. SLOPE LINE FROM EQUIPMENT TO FLOOR SINK. TURN DISCHARGE PIPE DOWN INTO FLOOR SINK WITH A 1" AIR GAP BETWEEN PIPING AND FLOOR SINK.
4. GREASE WASTE FIXTURES TO HAVE SINGLE VENT THRU ROOF. ALL GREASE RECEPTORS TO BE INSTALLED WITH WITH VENT AS SHOWN.
5. PLUMBING CONTRACTOR TO DO A SMOKE TEST AND SEAL ALL VENT PIPE LEAKING IN EXISTING WALLS, CEILING, AND CHASES. P.C. TO PERFORM SMOKE TEST WITH GENERAL CONTRACTOR PRESENT.
6. ALL PLUMBING VENT PIPING ON ROOF TO EXTEND ABOVE EXTERIOR PARAPET WALLS 6" FOR PROPER AIR DISPENSE.
7. ALL GREASE AND SANITARY SEWER LINES SIZE, FLOW DIRECTION, AND DEPTH TO BE VERIFIED BY PLUMBER PRIOR TO CONSTRUCTION. PLUMBING CONTRACTOR MAY ROUTE PIPING AS REQUIRE DUE TO EXISTING CONDITION.



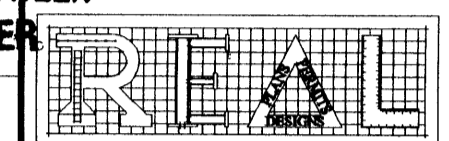
ELECTRIC WATER HEATER DETAIL

NO SCALE 02

PLUMBING SCHEDULES

NO SCALE 01

NO.	DATE	DESCRIPTION
1		
2		
3		



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OWNER:

TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

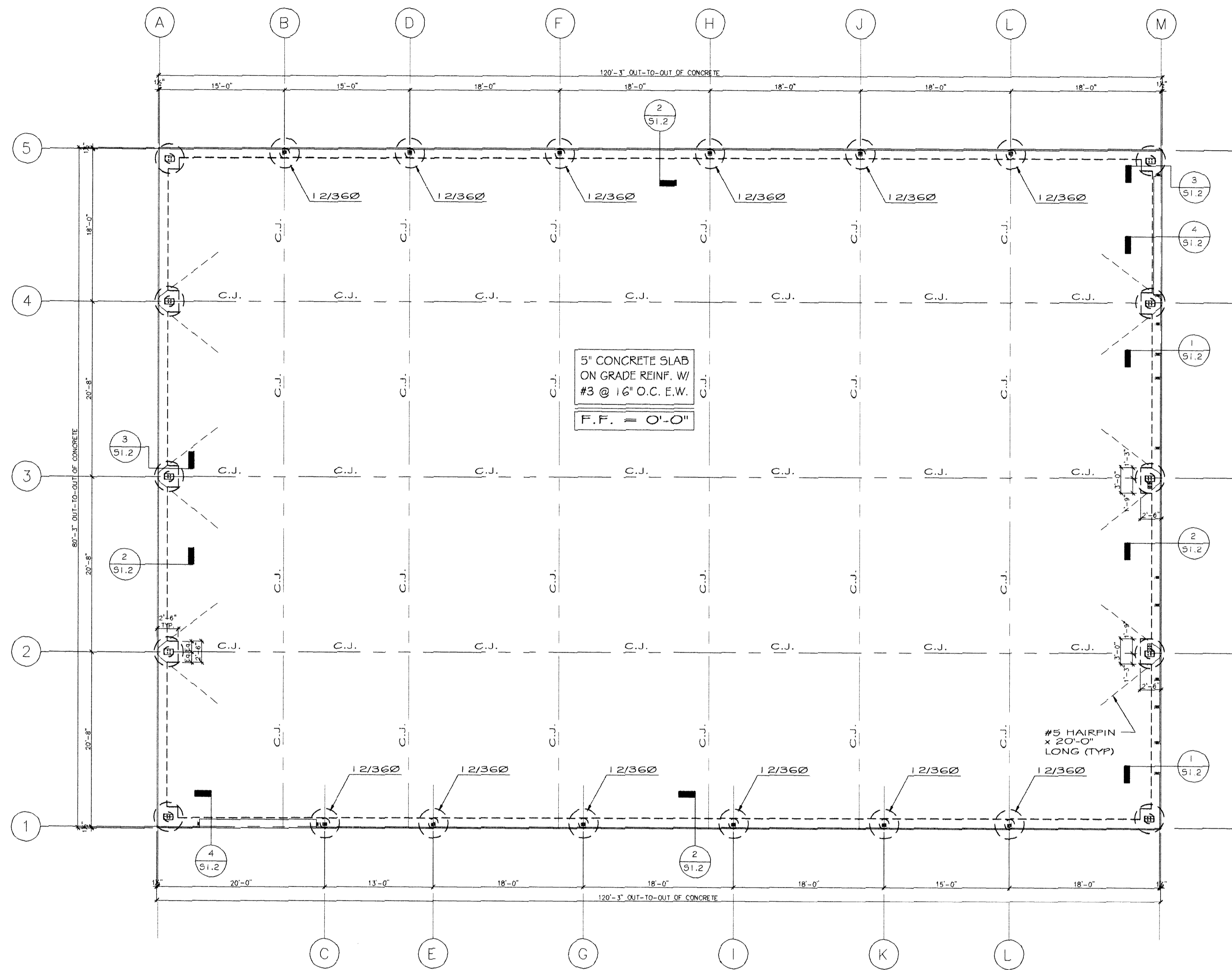
DRAWING TITLE:

PLUMBING SCHEDULES

DATE:	03-15-15
DESIGN:	8519
DRAWN:	8519
SCALE:	NO SCALE
JOB No:	14093033
FILE:	
DRAWING	

APPROVED PLUMBING PLAN
18-34588
SUBJECT PROVISION OF SEC. 102.2.6 OF THE UNIFORM PLUMBING CODE.
THIS PLAN MUST BE KEPT ON JOB FOR INSPECTORS. SEPARATE PERMIT FOR PLUMBING REQUIRED.
06-24-15 No. 372

P1.2

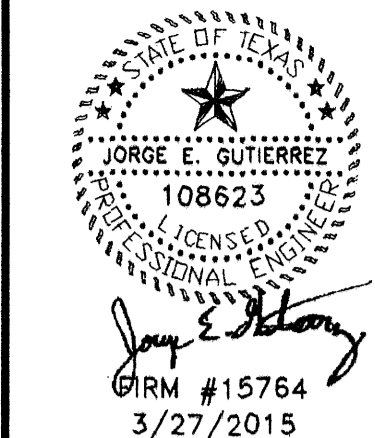


SPECIAL INSPECTIONS AS PER SECTION 1704 OF IBC REQUIRED FOR

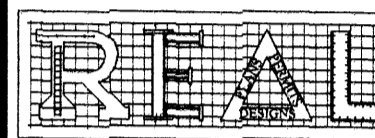
- ✓ STEEL CONSTRUCTION PER TABLE 1704.3
- ✓ CONCRETE CONSTRUCTION PER TABLE 1704.4
- ✓ MASONRY CONSTRUCTION PER TABLE 1704.5.1 & 1704.5.3
- ✓ SOILS
- ✓ PILE FOUNDATION
- ✓ SPRAYED FIRE RESISTANT MATERIALS
- ✓ EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)
- ✓ SMOKE CONTROL
- ✓ SPECIAL CASES

APPROVED FOR BUILDING PERMIT ONLY
CITY OF HOUSTON
CODE ENFORCEMENT DIVISION

The owner is responsible for compliance with the Building Code. Such approved plans and specifications shall not be changed, modified or altered without authorizations from the building official, and all work shall be done in accordance with the approved plans.
 02 JUL 2015 NO. 351



REVISIONS	No.	DATE	DESCRIPTION
	1		
	2		



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OWNER:

TRUCK SALES

PROPOSED METAL BUILDING FOR OFFICE WAREHOUSE FOR OFFICE WAREHOUSE LOCATED AT 10038 GROVER LANE HOUSTON, TEXAS 77041

DRAWING TITLE:

FOUNDATION PLAN

DATE: 12-03-14

DESIGN: 8613

DRAWN: 8613

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

JOB No: 14093033

FILE:

FILE NO: REAL-2014-499505-0018 OWNER: TRUCK

DRAWING

S1.1

FOUNDATION PLAN

1/8" = 1'-0"

02

- ① REFER TO SHEET S1.2 FOR NOTES AND DETAILS.
- ② COORDINATE THIS DRAWING WITH THE ANCHOR BOLT PLANS. ALL DISCREPANCIES SHALL BE REPORTED TO THE OWNER/ENGINEER FOR CLARIFICATION.
- ③ VERIFY DOOR LOCATION W/ ARCH. DWGS. AND METAL BUILDING DWGS.
- ④ ALL PIERS ARE 14/42φ (U.O.N.)

NO SCALE

03

KEYED NOTES

NO SCALE

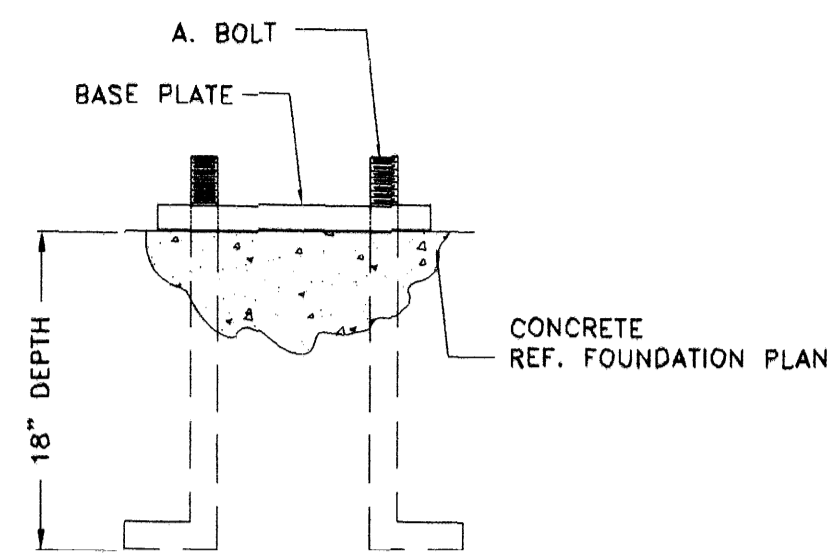
01

REFER ARCHITECTURAL PLANS FOR:
 ALL DIMENSIONS NOT SHOWN
 ALL DROPS NOT SHOWN
 ALL PLUMBING FIXTURES NOT SHOWN
 ALL ELECTRICAL STUBS NOT SHOWN
 ALL DROP VALUES NOT SHOWN

SITE : 10038 GROVER LANE

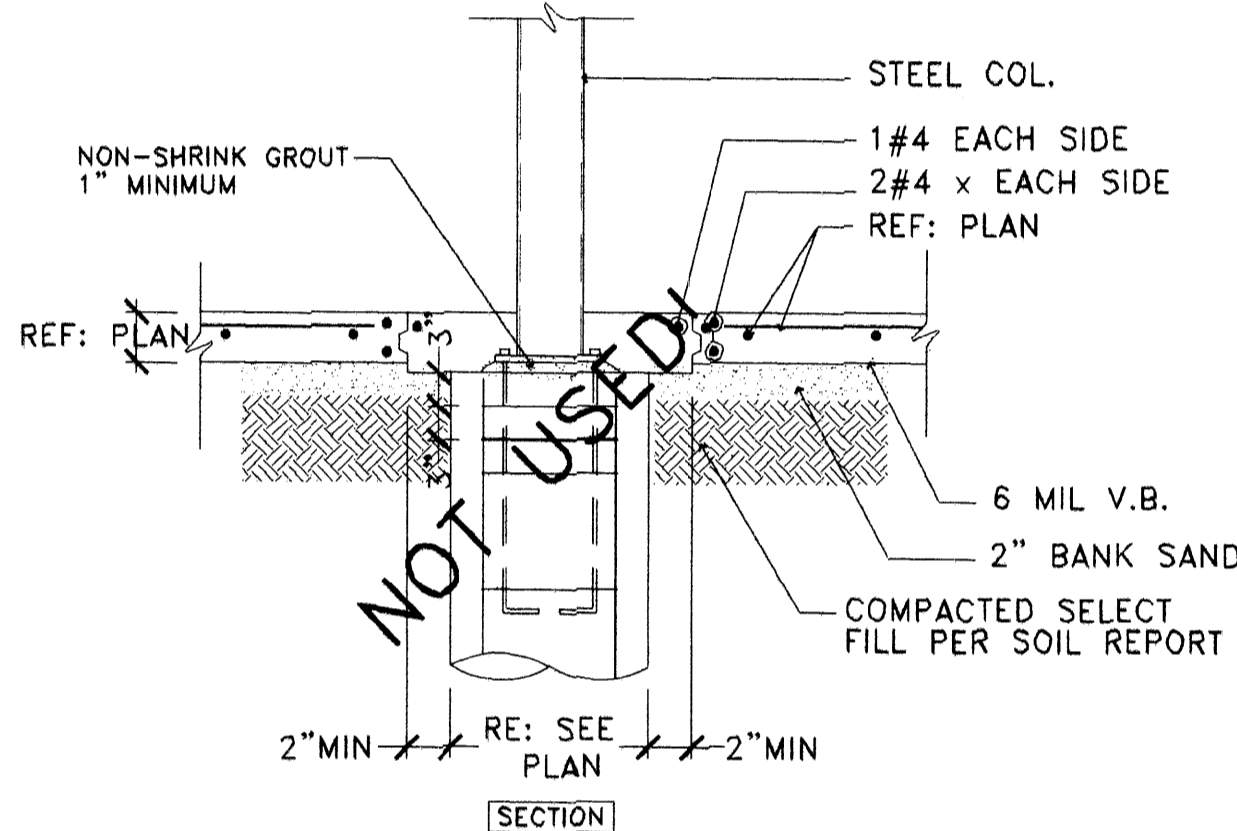
- VERIFY ALL DIMENSIONS AND ELEVATIONS OF RECESS, LEDGES AND STEPS WITH ARCHITECTS BEFORE COMMENCEMENT OF FORM WORK.
- NO CONCRETE IS TO BE PLACED WITHOUT APPROVAL FROM ENGINEER OR ARCHITECT.
- CONCRETE SHALL NOT BE PLACED IN FREEZING OR RAINY WEATHER.
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI318 WITH LATEST REVISIONS.
- CRUSHED STONE AND GRAVEL CONCRETE SHALL HAVE MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR ENTRAINED.
- REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 WITH A305 DEFORMATIONS, DETAILED, FABRICATED AND INSTALLED PER ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE," ACI-315 LATEST REVISION.
- WELDED SMOOTH WIRE FABRIC SHALL CONFORM TO ASTM-A185.
- REINFORCING STEEL MINIMUM COVERAGE UNLESS NOTED ON REBAR CHAIRS SHALL BE:
 FOOTINGS 3" BOT., 3" SIDES & 2" TOP
- CHAMFER ALL EXPOSED EDGES 3/4" AT 45 DEGREES.
- HOLES FOR DRILLED FOOTINGS SHALL BE PLUMB AND FREE OF ALL LOOSE MATERIALS AND WATER. CONCRETE AND REINFORCING SHALL BE PLACED IMMEDIATELY AFTER EXCAVATION.
- PROVIDE CORNER BARS IN THE OUTSIDE FACE OF EXTERIOR GRADE BEAMS TO MATCH THE HORIZONTAL STEEL. AT ALL RE-ENTRANT CORNERS PLACE 2 - # 4 X 4'-0" IN THE SLAB.
- UNDERGROUND UTILITIES OR OBSTRUCTIONS ENCOUNTERED SHALL BE REMOVED, RELOCATED OR LEFT IN PLACE AS DIRECTED BY ENGINEER.
- BARS DETAILED AS CONTINUOUS SHALL BE LAPPED 50 BAR DIAMETER AT SPLICES. THE SPLICES SHALL OCCUR AT MIDSPAN FOR TOP BARS AND OVER THE SUPPORTS FOR BOTTOM BARS.
- ALL CONSTRUCTION SHALL CONFORM TO CURRENT CITY OF HOUSTON, TEXAS BUILDING CODE. (THE LATEST EDITION OR IBC).
- FOOTING DESIGN BASED ON ALLOWABLE SOIL BEARING PRESSURE OF 4,000 PSF FOR TOTAL DEAD LOAD OR 6,000 PSF FOR TOTAL LOAD AT A DEPTH OF 9'-0" FEET BELOW NATURAL GRADE, PER SOIL REPORT GEO-1841 BY RAM TESTING INC., DATED SEPTEMBER 16, 2014.
- SUBGRADE PREPARATION AND COMPACTION SHALL BE PER SOIL REPORT.
- THE GENERAL CONTRACTOR SHALL EXAMINE THE MECHANICAL DRAWINGS FOR REQUIRED MECHANICAL WORK TO BE PLACED IN CONCRETE. THIS CONTRACTOR SHALL NOTIFY AND RECEIVE PERMISSION FROM THE STRUCTURAL ENGINEER FOR THE PLACING OF SLEEVES, PIPES OR OTHER MATERIALS.
- ALL PIPES GOING THROUGH EXTERIOR GRADE BEAMS SHALL BE SLEEVED. ALL PIPES SHALL BE LOCATED AT MID DEPTH OF GRADE BEAM.
- SIZE OF SLEEVES SHALL NOT EXCEED 1/3 OF OVERALL THICKNESS OF GRADE BEAM. SPACING OF SLEEVES SHALL NOT BE CLOSER THAN 3 DIAMETERS ON CENTER.
- THE ENGINEER SHALL NOT BE LIABLE FOR ANY FOUNDATION REVISION OR CHANGES FROM THE ARCHITECTS, CONTRACTORS OR OWNERS WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
- CURE ALL CONCRETE IMMEDIATELY AFTER FINISHING WITH APPROVED CHEMICAL CURING COMPOUND.
- IF ANY TREES THAT ARE REMOVED WITHIN 25 FEET PROXIMITY TO THE FOUNDATION WITHIN 6 MONTHS BEFORE POURING THE CONCRETE WILL REQUIRE AN ENGINEERS APPROVAL.
- CONTRACTOR/OWNER/DEVELOPER SHOULD NOTIFY THE ENGINEER OF ANY TREES THAT ARE NOT MENTIONED IN THE DESIGN DOCUMENTS BEFORE THE FOUNDATION IS BUILT. FAILURE TO MAKE SUCH NOTIFICATION SHALL VOID ANY LIABILITY BY REAL DESIGNS.

-NOTE: THE STRUCTURE HAS BEEN DESIGNED TO WITHSTAND 110 MPH WIND SPEED WITH A 3 SEC GUST.

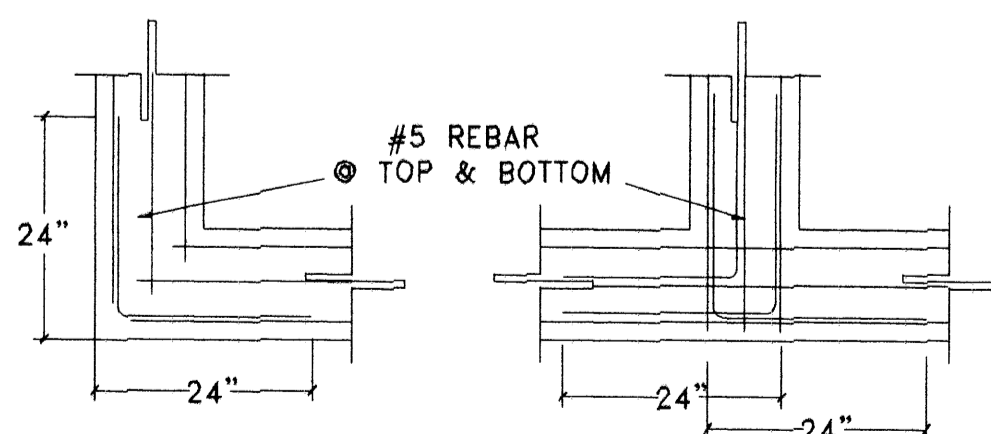


-NOTE: REFER TO MTL. BLDG. DRWGS. FOR LOCATION OF BOLTS AND SIZES.

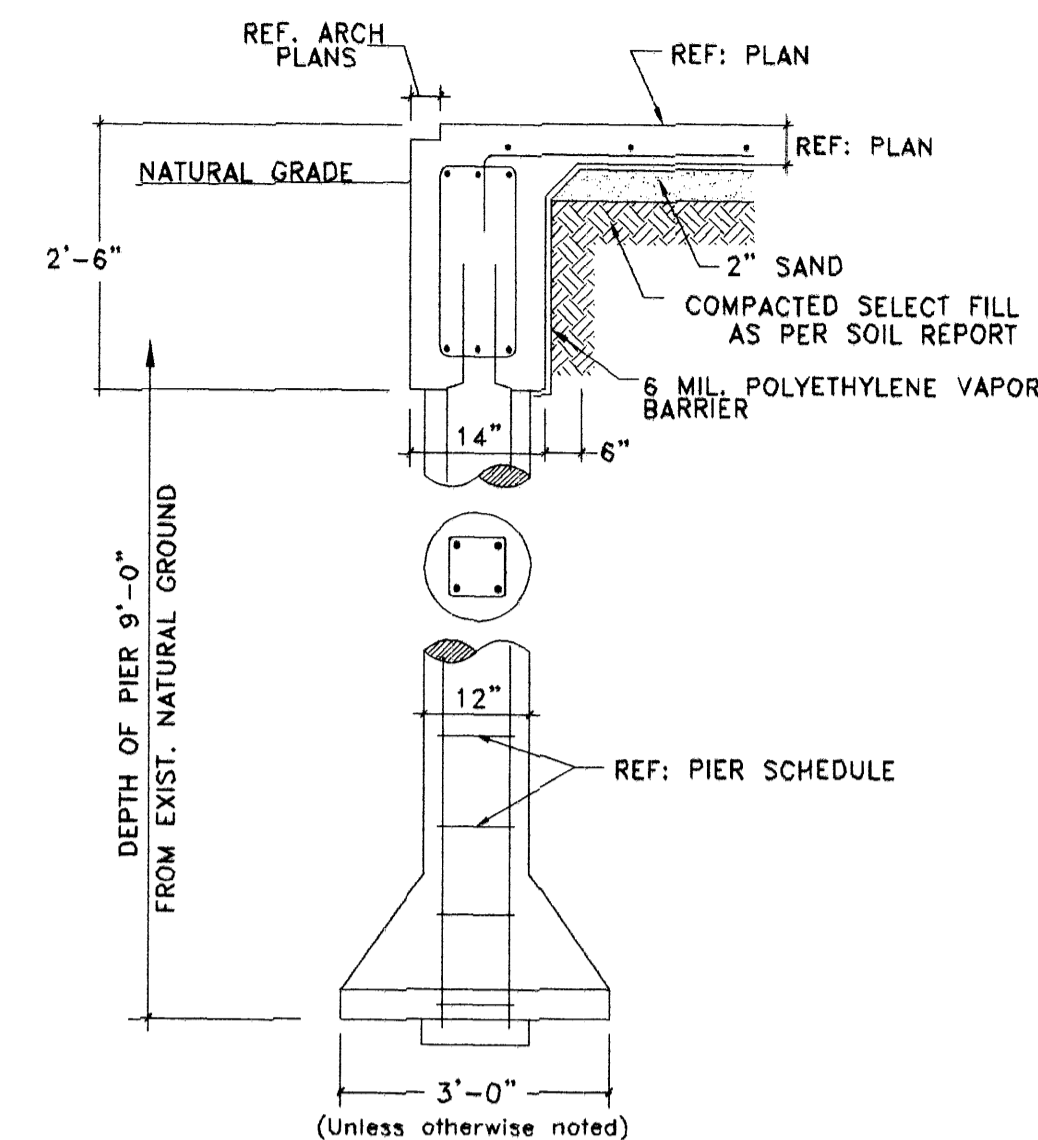
ANCHOR BOLT EMBEDMENT DETAIL NO SCALE 10



GRADE BEAM DETAIL @ INTERIOR COLUMN NO SCALE 09

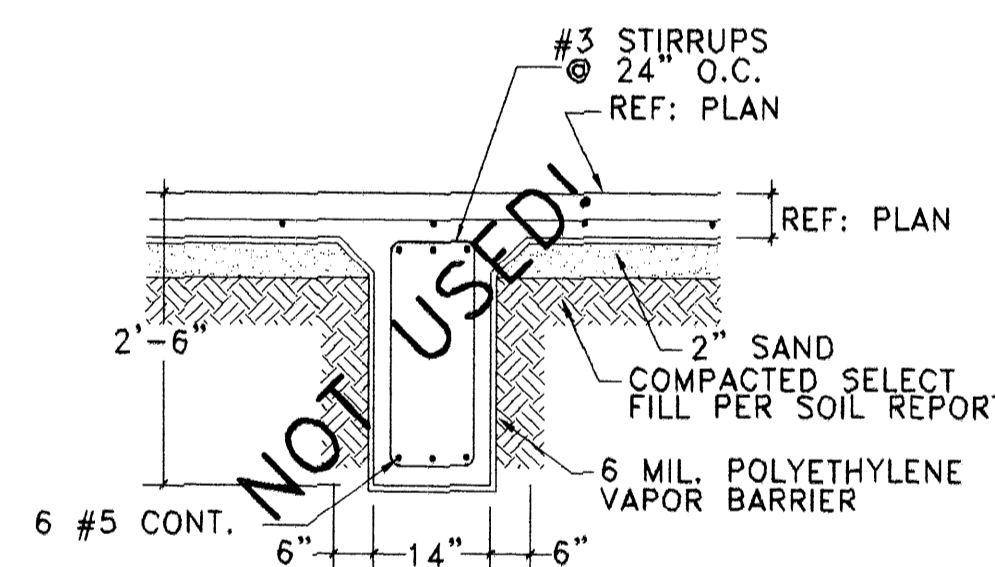


TYP. BAR PLACING DETAIL @ CORNER & INTERSEC. NO SCALE 08

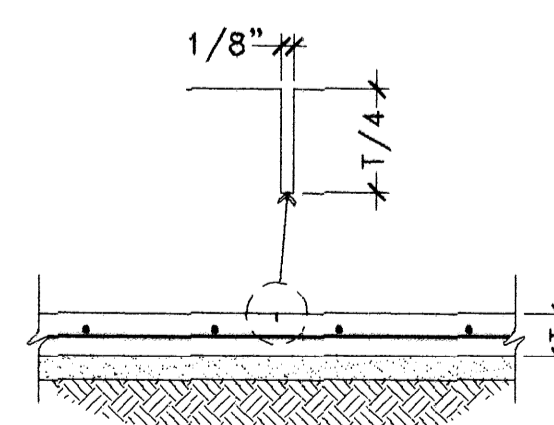


SHAFT/BELL	VERTICAL REINF.	HORIZONTAL TIES
12/36	4-#4	#3 @ 8" O.C.
14/42	4-#5	#3 @ 10" O.C.

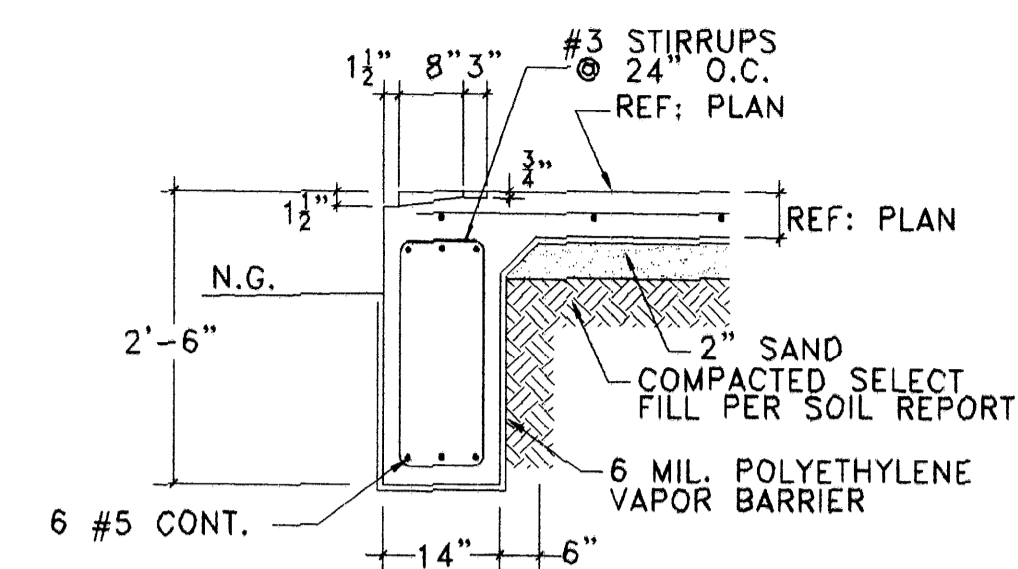
PIER DETAIL W/ SCHEDULE NO SCALE 07



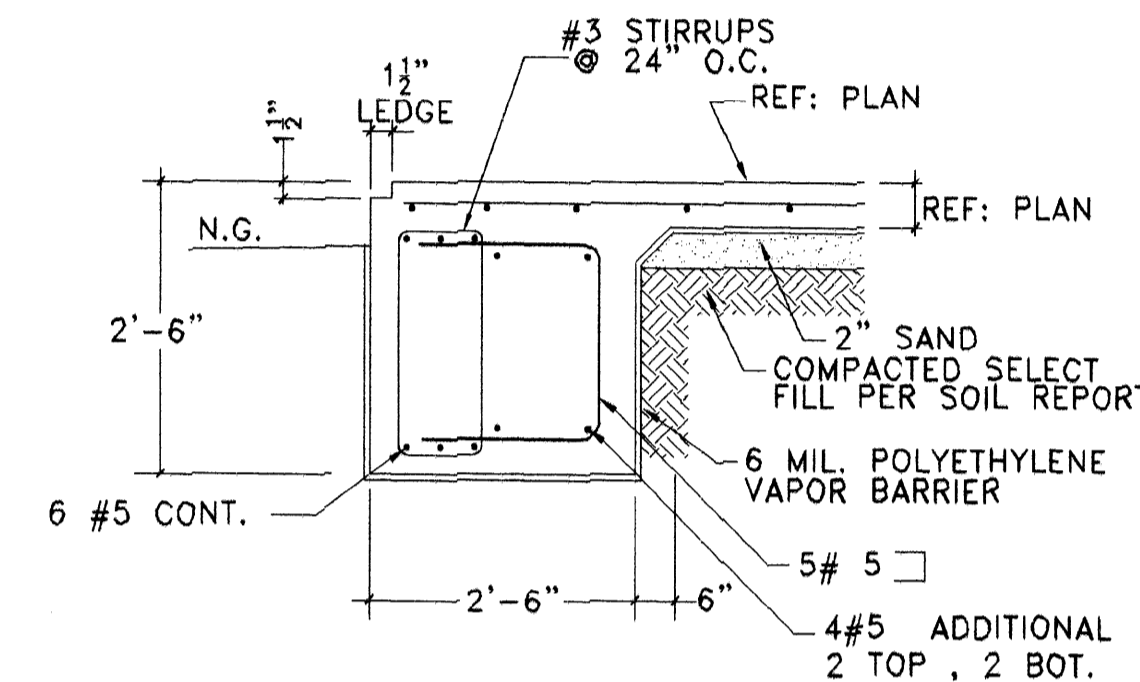
GRADE BEAM DETAIL @ INTERIOR NO SCALE 06



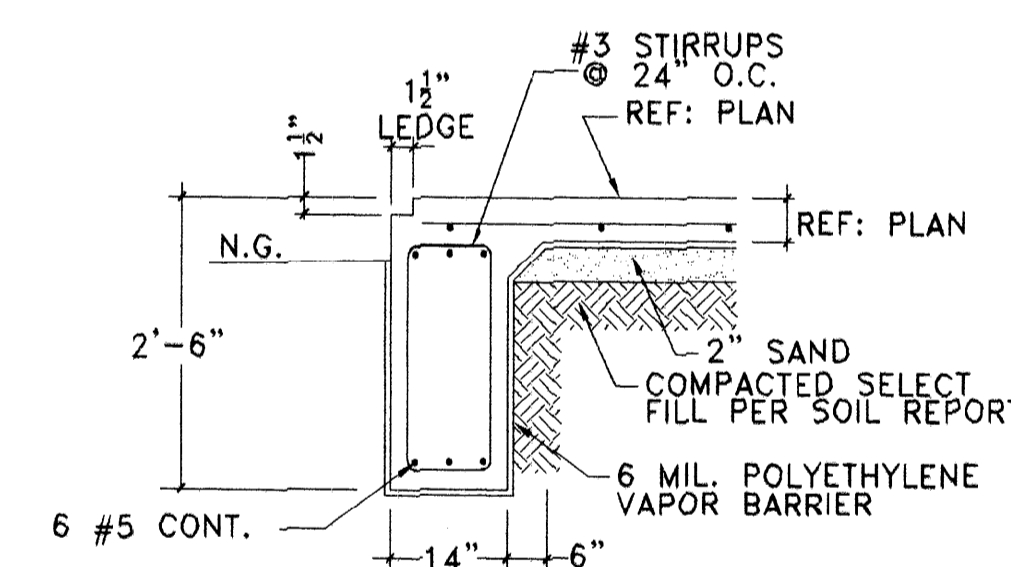
CRACK CONTROL JOINT (C.J.) NO SCALE 05



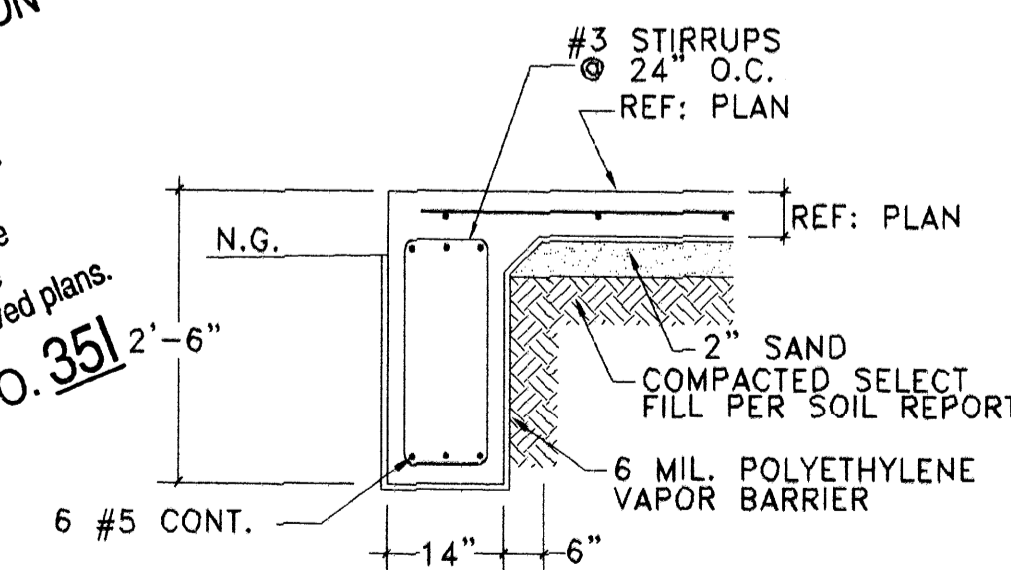
GRADE BEAM DETAIL @ O.H. DOOR NO SCALE 04



GRADE BEAM DETAIL @ CONCRETE CAP NO SCALE 03

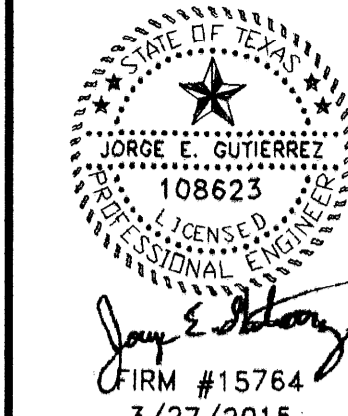


GRADE BEAM DETAIL @ PERIMETER NO SCALE 02



GRADE BEAM DETAIL @ PERSONAL DOOR NO SCALE 01

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DRAWING TITLE:

FOUNDATION NOTES & DETAILS

DATE: 12-03-14

DESIGN: 8613

DRAWN: 8613

SCALE: NO SCALE

JOB No: 14093033

FILE:

DRAWING: **S1.2**

GENERAL CONCRETE NOTES NO SCALE 11