

NEW OFFICE & WAREHOUSE

6817 ROANOKE ST HOUSTON, TX 77028

DRAWING INDEX:

CIVIL PLANS:

C1.0 EXISTING SITE PLAN
 C2.0 SITE PLAN
 C2.2 SITE PLAN DETAILS
 C2.3 SITE PLAN DETAILS
 C3.0 DRAINAGE PLAN
 C3.2 DRAINAGE DETAILS
 C4.0 GRADING PLAN
 C5.0 SWPP PLAN
 C5.2 SWPP DETAILS
 C5.3 SWPP DETAILS

ARCHITECTURAL PLANS:

A0.0 COVER PLAN
 A1.0 DIMENSION/ROOF PLAN
 A2.0 EXTERIOR ELEVATIONS
 A3.0 FINISH FLOOR PLAN
 A3.2 FINISH SCHEDULE
 A3.3 FINISH SCHEDULE
 A4.0 ENLARGED ELEVATION

STRUCTURAL PLAN:

S1.0 FOUNDATION PLAN
 S1.2 FOUNDATION DETAILS
 S2.0 STRUCTURAL PLAN
 SHOP DRAWINGS

MECHANICAL PLAN:

M1.0 MECHANICAL PLAN
 M1.2 MECHANICAL DETAILS

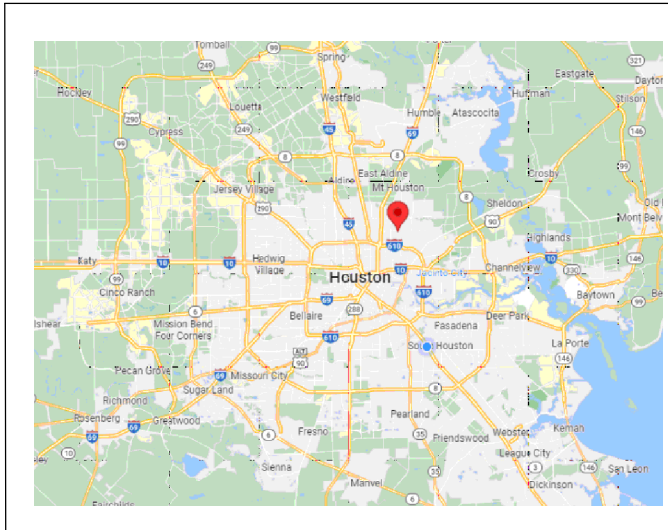
ELECTRICAL PLAN:

E1.0 ELECTRICAL NOTES
 E2.0 ELECTRICAL PLAN
 E3.0 ELECTRICAL PLAN
 E4.0 ONE-LINE DIAGRAM & PANEL

PLUMBING PLAN:

P1.0 PLUMBING PLAN
 P2.0 PLUMBING DETAIL

VICINITY INDEX:



SITE PLAN:

CODE ANALYSIS:

BUILDING CODES:	2015 INTERNATIONAL BUILDING CODE WITH CITY OF HOUSTON AMENDMENTS AS PER SEC 101.2 2015 INTERNATIONAL GAS CODE 2015 UNIFORM MECHANICAL CODE 2015 UNIFORM PLUMBING CODE 2023 NATIONAL ELECTRICAL CODE & NBSP 2015 INTERNATIONAL FIRE CODE 2015 INTERNATIONAL ENERGY CONSERVATION CODE	TRAVEL DISTANCE:	200' TRAVEL DISTANCE WITHOUT SPRINKLERS (TABLE 1015.1, IBC Ed 2015)
ACCESSIBILITY:	TEXAS ACCESSIBILITY STANDARDS OF TEXAS BARRIERS ACT	FIRE PROTECTION:	<u>AUTOMATIC SPRINKLER SYSTEM REQUIREMENTS (SEC. 903, IBC Ed 2015):</u> - GROUP S-1 FACILITY WILL NOT PROVIDE AUTOMATIC SPRINKLERS BY SEC. 903.2.1.3 IBC Ed 2015. <u>FIRE RESISTANCE HOURS RATING REQUIREMENTS FOR BUILDING (TABLE 601, IBC Ed 2015):</u> TYPE OF CONSTRUCTION TYPE V-B A. STRUCTURAL FRAME = 0 B. BEARING WALLS EXTERIOR = 0 BEARING WALLS INTERIOR = 0 C. NONBEARING WALLS INTERIOR = 0 D. FLOOR CONSTRUCTION = 0 E. ROOF CONSTRUCTION = 0
BUILDING AREA:	1,500.00 SQ. FT. - OFFICE/WAREHOUSE 1,500.00 SQ.FT. - TOTAL BUILDING AREA	REQUIRED PLUMBING FIXTURES:	LAVATORY 1 WATER CLOSET 1
OCCUPANCY:	GROUP S-1/B (SEC. 303, IBC Ed 2015)		
TYPE OF CONSTRUCTION:	V-B (TABLE 601, IBC Ed 2015)		
ALLOWABLE HEIGHTS:	1 STORY MAXIMUM HEIGHT (TABLE 503, IBC Ed 2015) 9,000 SQ.FT. MAXIMUM ALLOWABLE (TABLE 503, IBC ED 2015)		
OCCUPANT LOAD:	<u>OFFICE/WAREHOUSE</u> WAITING AREA: 46 SQ. FT./ 15 GROSS = 3 OFFICE AREA: 88 SQ. FT./ 100 GROSS = 1 WAREHOUSE AREA: 1169.67 SQ. FT./ 200 GROSS = 6 TOTAL OCCUPANTS: 10 (TABLE 1004.7, IBC Ed 2015)		
EXITS WIDTH:	<u>EGRESS WIDTH PER OCCUPANT</u> 10 OCCUPANTS x 0.20 IN. PER OCCUPANTS = 2 INCHES REQUIRED (TABLE 1005.1, IBC Ed 2015)		

LEGAL DESCRIPTION:

PROPERTY ADDRESS: 6817 ROANOKE ST
HOUSTON TX 77028

LEGAL DESCRIPTION: LT 221 BLK 8
PELHAM PLACE SEC 3

LAND USE: COMMERCIAL

MAP FACET: 5560A

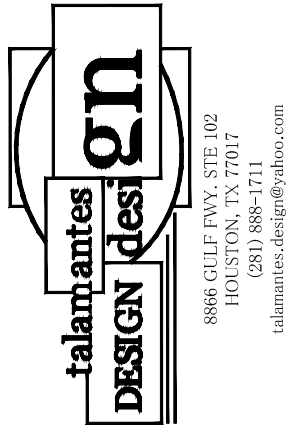
LAND AREA: 8,040 SQ FT

NEIGHBORHOOD: 5921.02

KEY MAP: 454M

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CODES, INCLUDING THE 2015 INTERNATIONAL BUILDING CODE. THE DRAWINGS AND SPECIFICATIONS ARE AN OUTLINE OF THE MINIMUM MATERIAL REQUIREMENTS AND THEIR APPLICATION.
- BEFORE COMMENCING WORK, CONTRACTOR SHALL PERFORM A SURVEY OF EXISTING CONDITIONS IN ORDER TO VERIFY ACCURACY OF DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS WITH ACTUAL CONDITIONS. CONTRACTOR SHALL NOTIFY THE DESIGNER IMMEDIATELY IN WRITING OF ANY PROBLEMS FOUND THAT MAY AFFECT THE WORK. PROCEEDING WITH THE WORK SHALL CONSTITUTE ACCEPTANCE BY THE CONTRACTOR THAT CONDITIONS ARE CORRECT AND THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR CONDITIONS.
- ALL CONSTRUCTION SHALL BE COMPLETE, FINISHED, AND OF THE HIGHEST WORKMANSHIP. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE OWNER AND DESIGNER.
- APPROVED PLANS AND SPECIFICATIONS SHALL NOT BE MODIFIED NOR CHANGED WITHOUT AUTHORIZATIONS FROM THE BUILDING OFFICIAL.



CONSULTANT

OWNER

NEW OFFICE/WAREHOUSE
6817 ROANOKE ST.
HOUSTON TX. 77028

ISSUE LOG

	DATE	DESCRIPTION
PRE		
PMT		
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PROJECT NO:

CHECKED BY: M.A.T

DATE OF ISSUE:

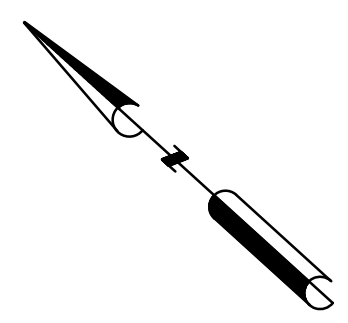
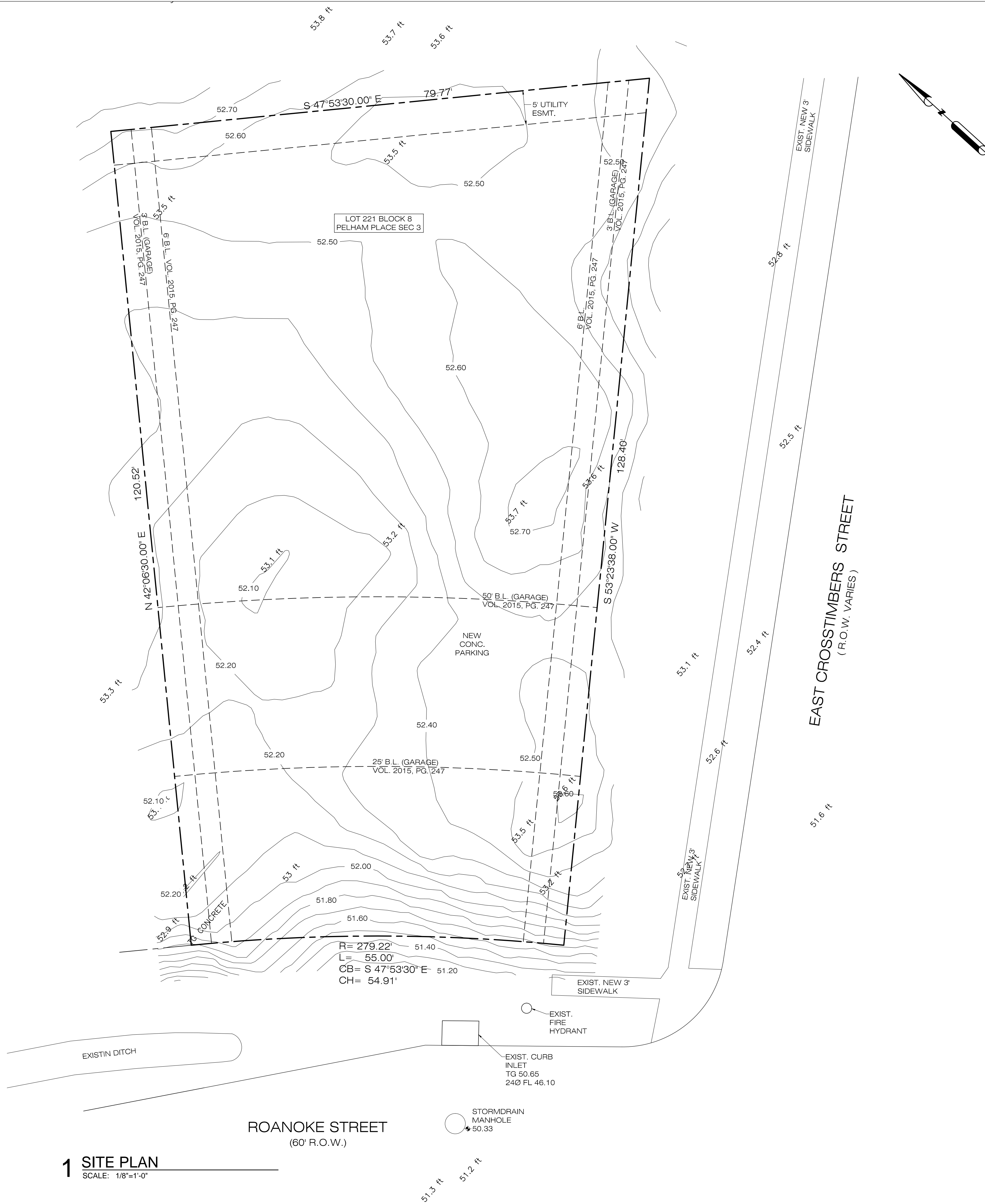
SHEET No.

COVER PLAN

SHEET No.

C0.0

8866 GULF FWY, STE 102
HOUSTON, TX 77017
(281) 888-1711
talamantes_design@yahoo.com



1. DO NOT SCALE THESE DRAWINGS—USE DIMENSIONS SHOWN & ALL LOCATIONS (FIELD VERIFY ALL DIMS. PRIOR TO CONSTRUCTION).
2. CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR ALL TEMPORARY UTILITIES TO THE CONSTRUCTION SITE.
3. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE SAFETY OF PEDESTRIANS AND ALL VEHICULAR TRAFFIC FROM CONSTRUCTION RELATED ACTIVITIES DURING THE COURSE OF THIS PROJECT.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND SAFETY OF THE WORK, WORKERS, SUBCONTRACTORS, MATERIALS, AND EQUIPMENT.
5. DO NOT CUT ANY STRUCTURAL WORK WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER.

2 GENERAL NOTES
SCALE: N.T.S.

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

CONSULTANT

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NEW OFFICE/WAREHOUSE
6817 ROANOKE ST.
HOUSTON TX. 77028

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DATE	DESCRIPTION
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PROJECT NO:
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SHEET No.

EXISTING PLAN

1/8"=1'-0"

SHEET No.

C1.0

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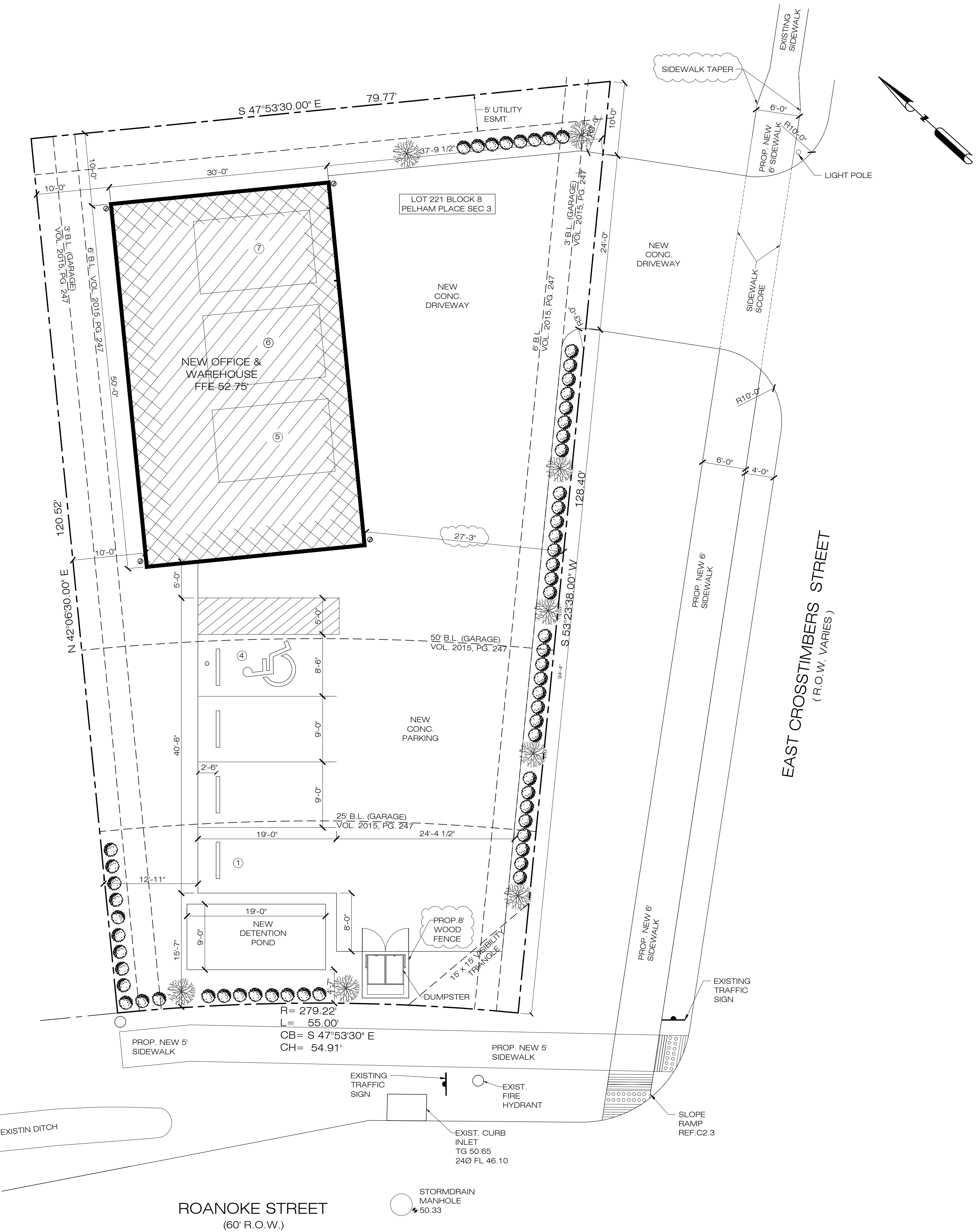
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SITE PLAN

1/8" = 1'-0"

SHEET No.

C2.0



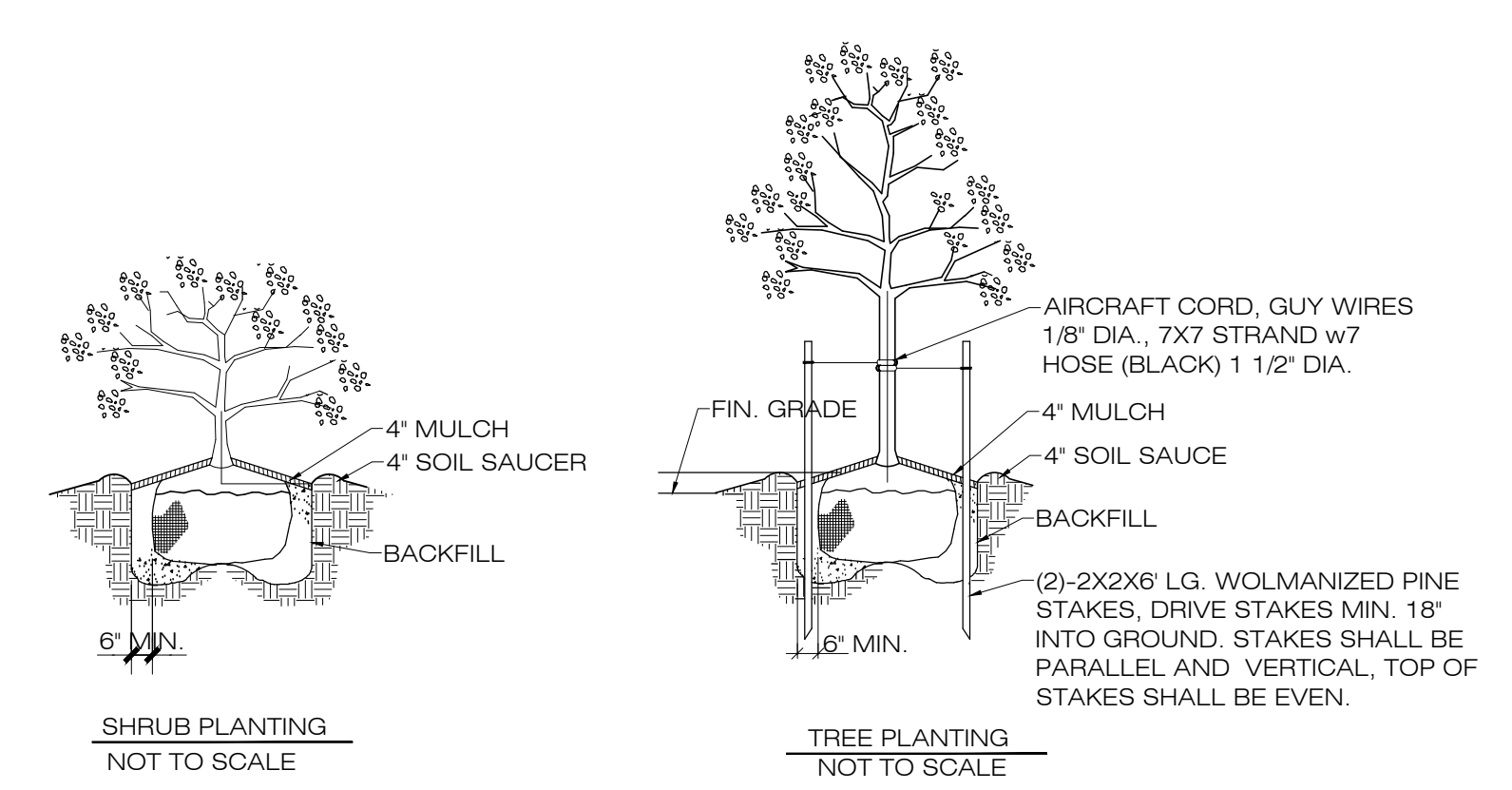
1 SITE PLAN
SCALE: 1/8"=1'-0"

LANDSCAPE REQUIREMENTS

STREET	128.4/30 = 5 TREES
SHRUBS = 5X10=50 SHRUBS	55/30 = 2 TREES
SHRUBS = 2X10=20 SHRUBS	
PARKING LOT TREES	7/10 = 1 TREES
TOTAL TREES = 8 TREES	
TOTAL SHRUBS = 70 SHRUBS	

- LIVE OAK - (QUERCUS VIRGINIANA), LITTLE GEM MAGNOLIA OR MEXICAN PLUM. 3" MIN. CALIPER, 8' MIN HEIGHT, CONTAINER GROWN.
- DWARF PURPLE SAGE - (LEUCOPHYLLUM FRUTESCENS 'COMPACTA'). 3 GAL. CONTAINER, CONTAINER GROWN.

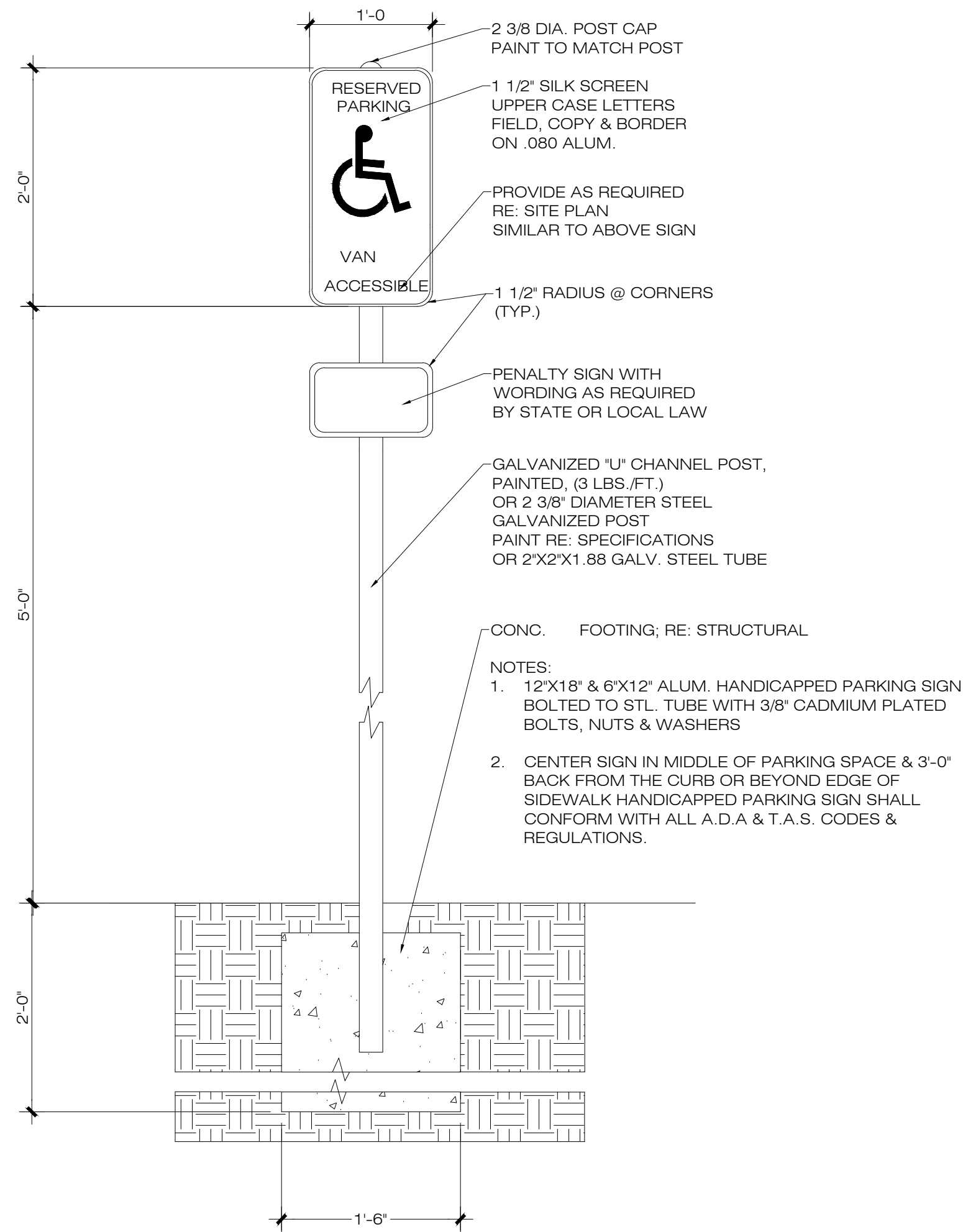
2 LEGEND
SCALE: N.T.S.



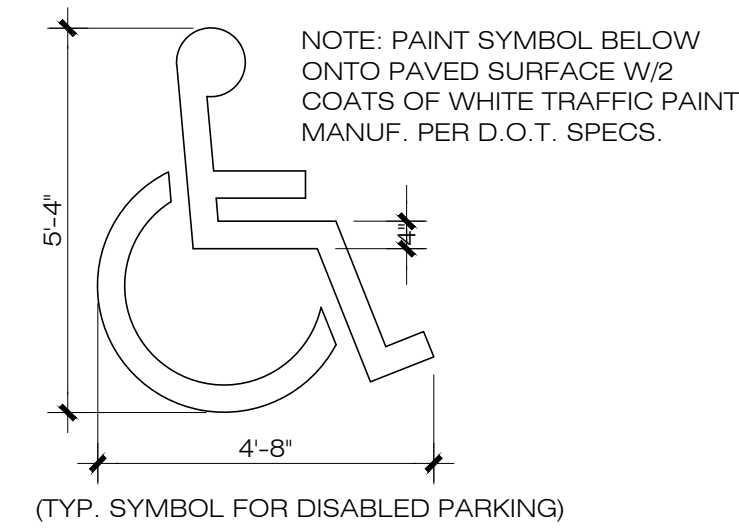
3 PLANT DETAIL
SCALE: N.T.S.

PARKING ANALYSIS

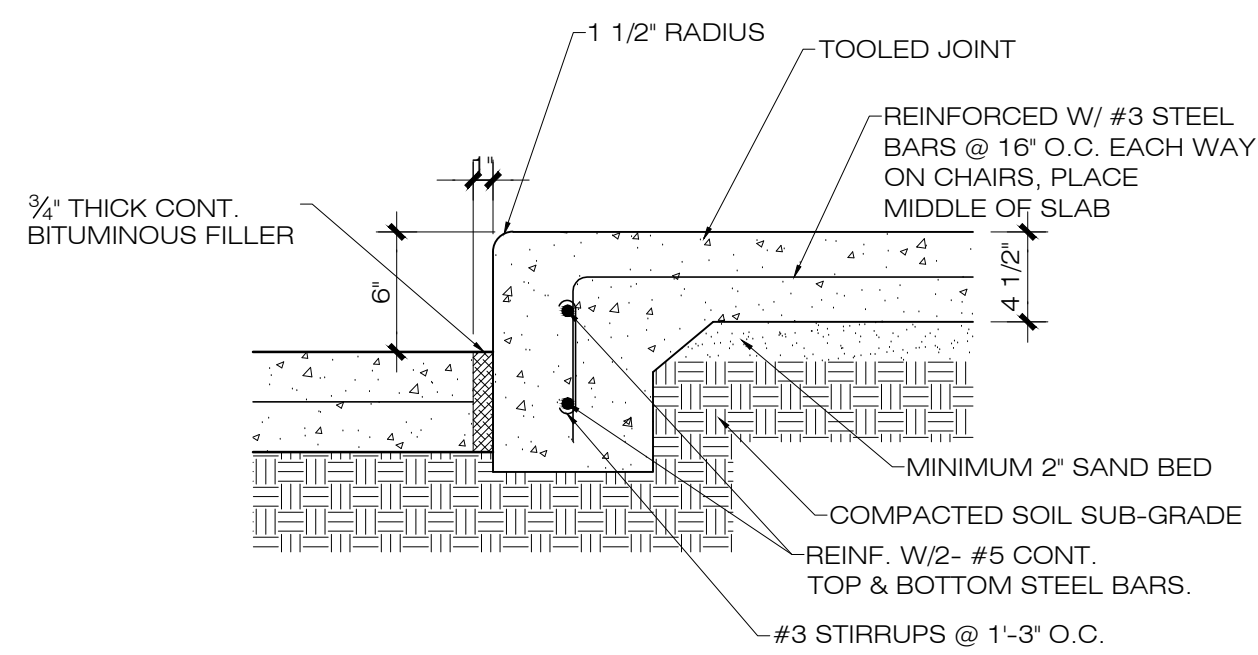
TENANT	SQ. FT.	PARKING REQUIRED	PARKING NEEDED
#A - MULTI-TENANT			
1. AT GRADE			
OFFICE	285.00 SQ.FT.	2.5/1000	1 PARKING
WAREHOUSE	1,215.00 SQ.FT.	1/5000	1 PARKING
TOTAL NEEDED			2 PARKING
TOTAL PROVIDED			7 PARKING



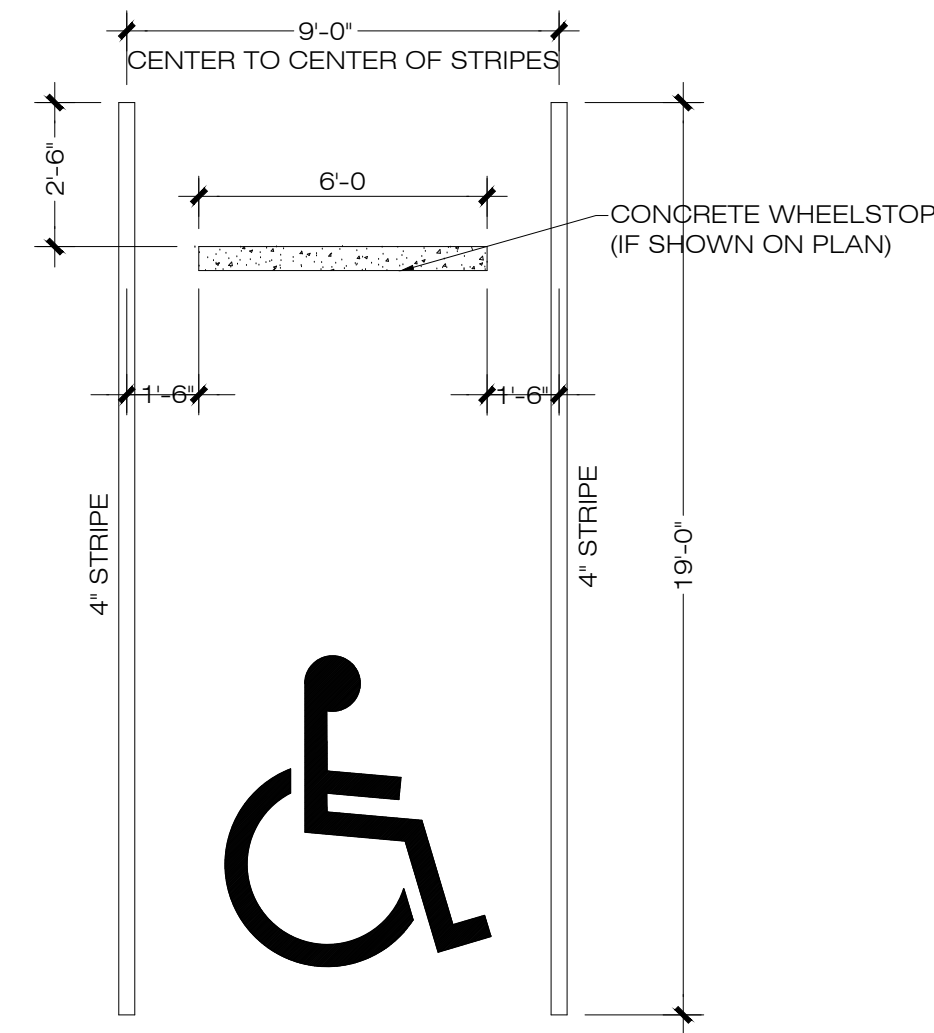
1 STRIPING DETAIL
SCALE: N.T.S.



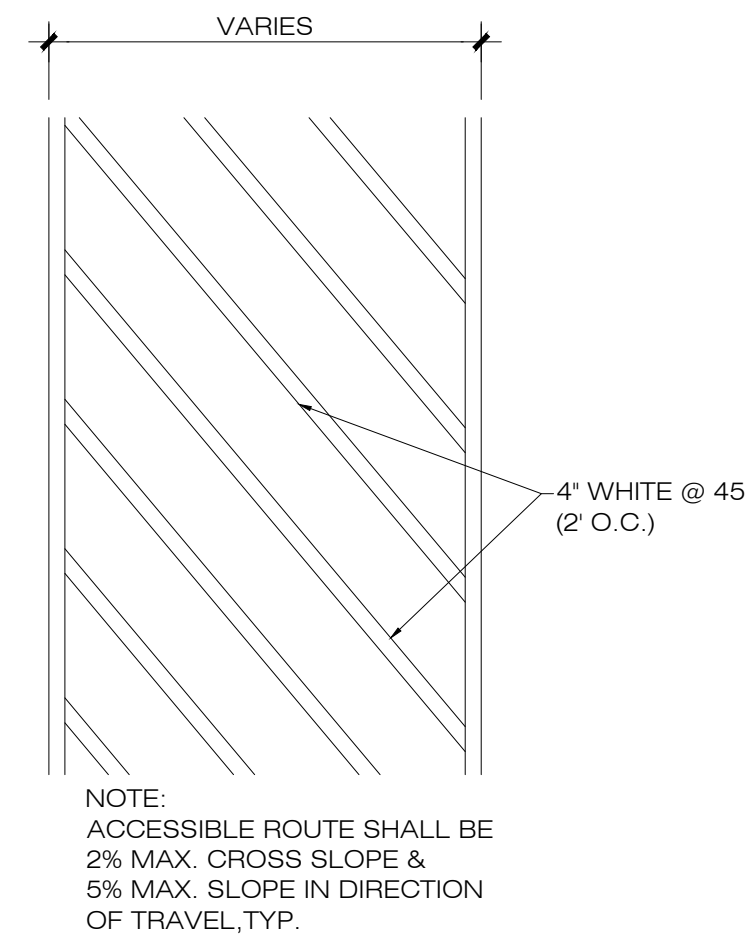
5 HANDICAP SIGN
SCALE: N.T.S.



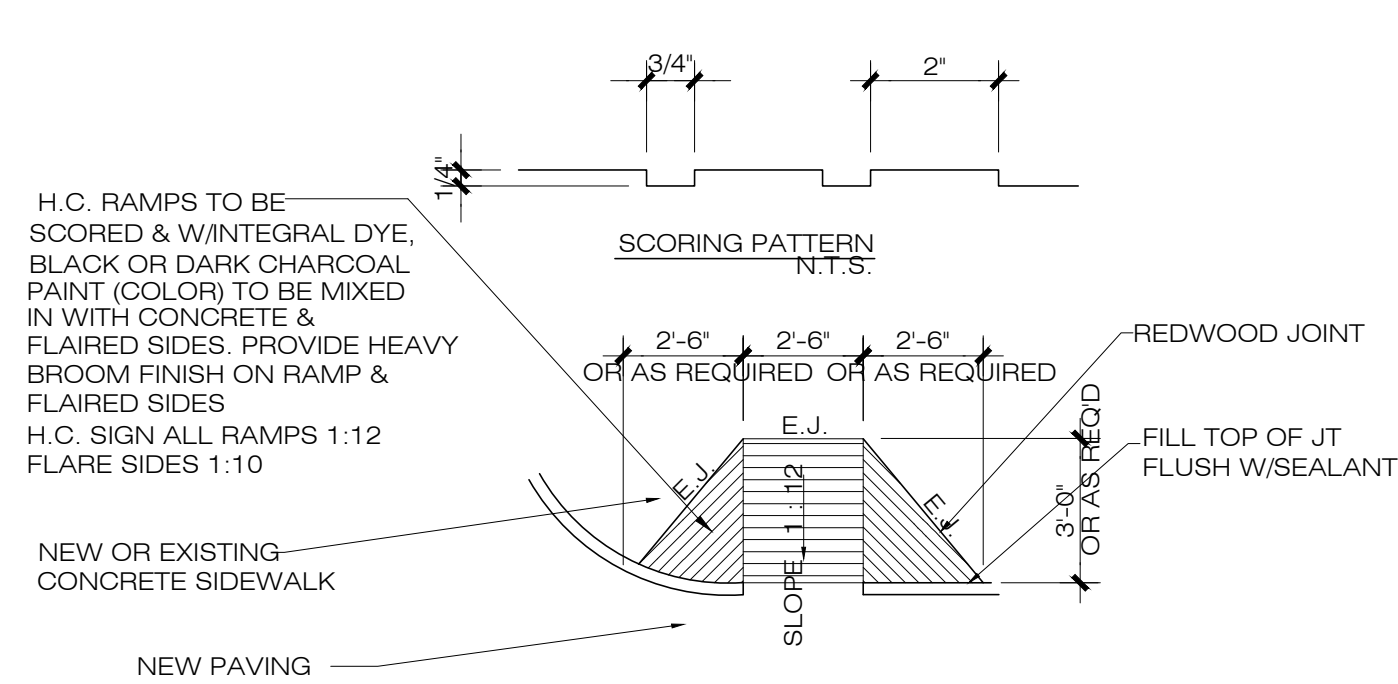
8 TYPICAL CURB @ SIDEWALK
SCALE: N.T.S.



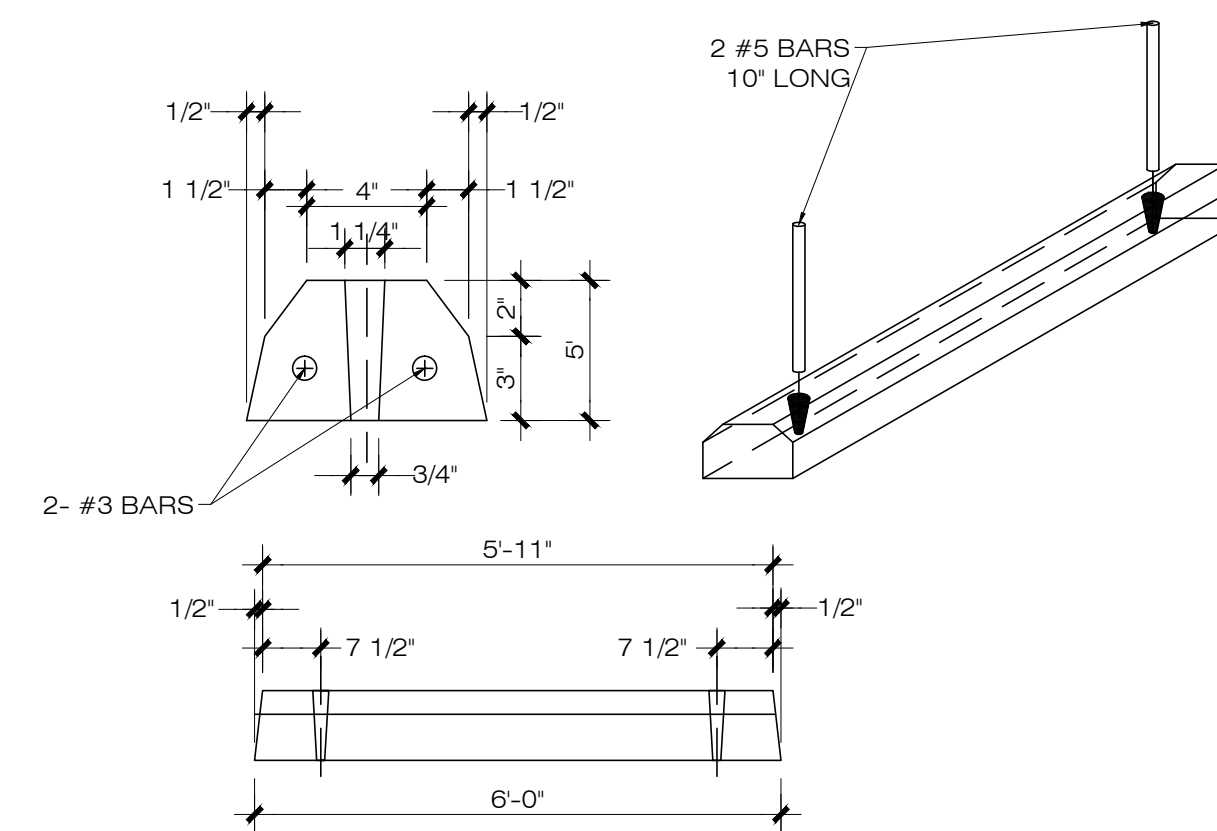
2 STRIPING DETAIL
SCALE: N.T.S.



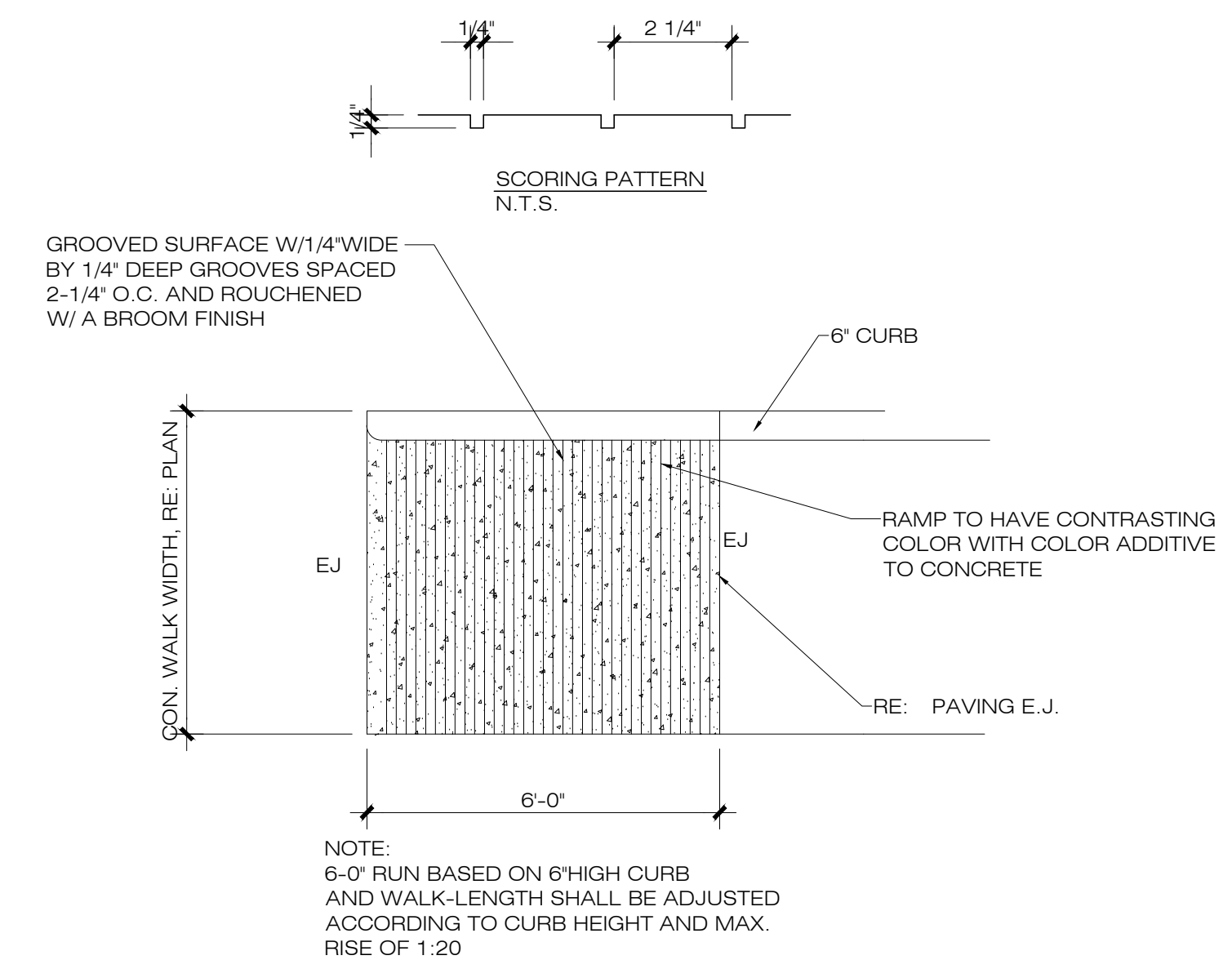
3 CROSSWALK STRIPING
SCALE: N.T.S.



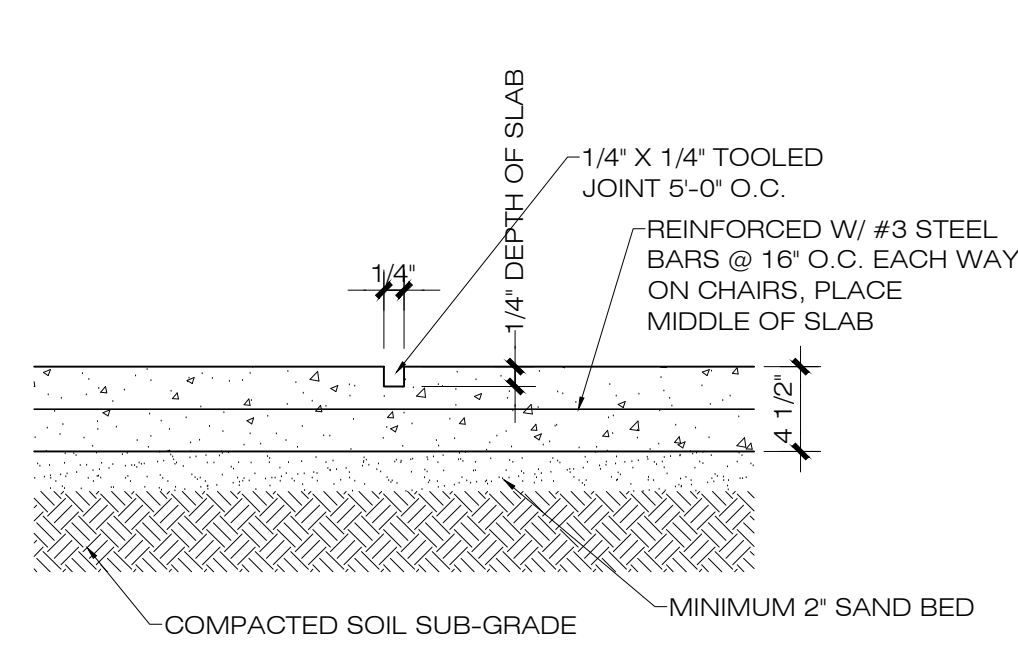
6 RAMP DETAIL
SCALE: N.T.S.



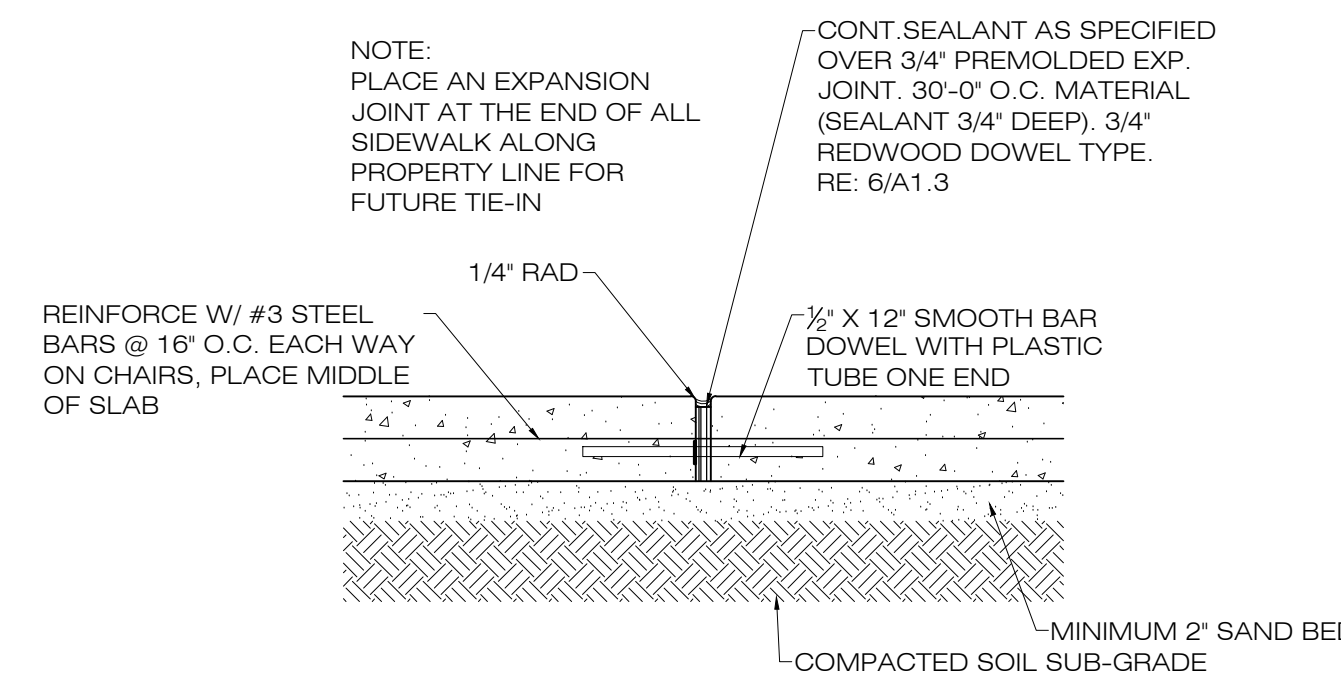
7 PRECAST CONCRETE WHEEL STOP
SCALE: N.T.S.



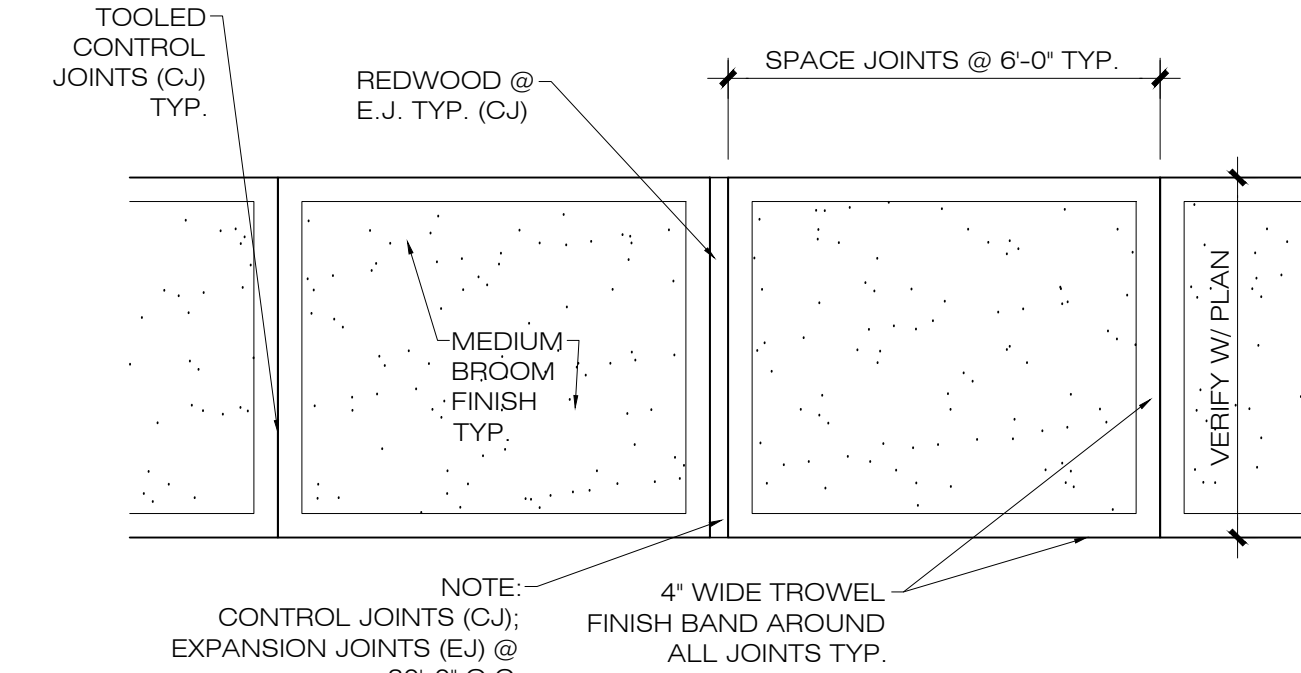
8 WHEEL CHAIR RAMP
SCALE: N.T.S.



9 SIDEWALK CONTROL JOINT
SCALE: N.T.S.

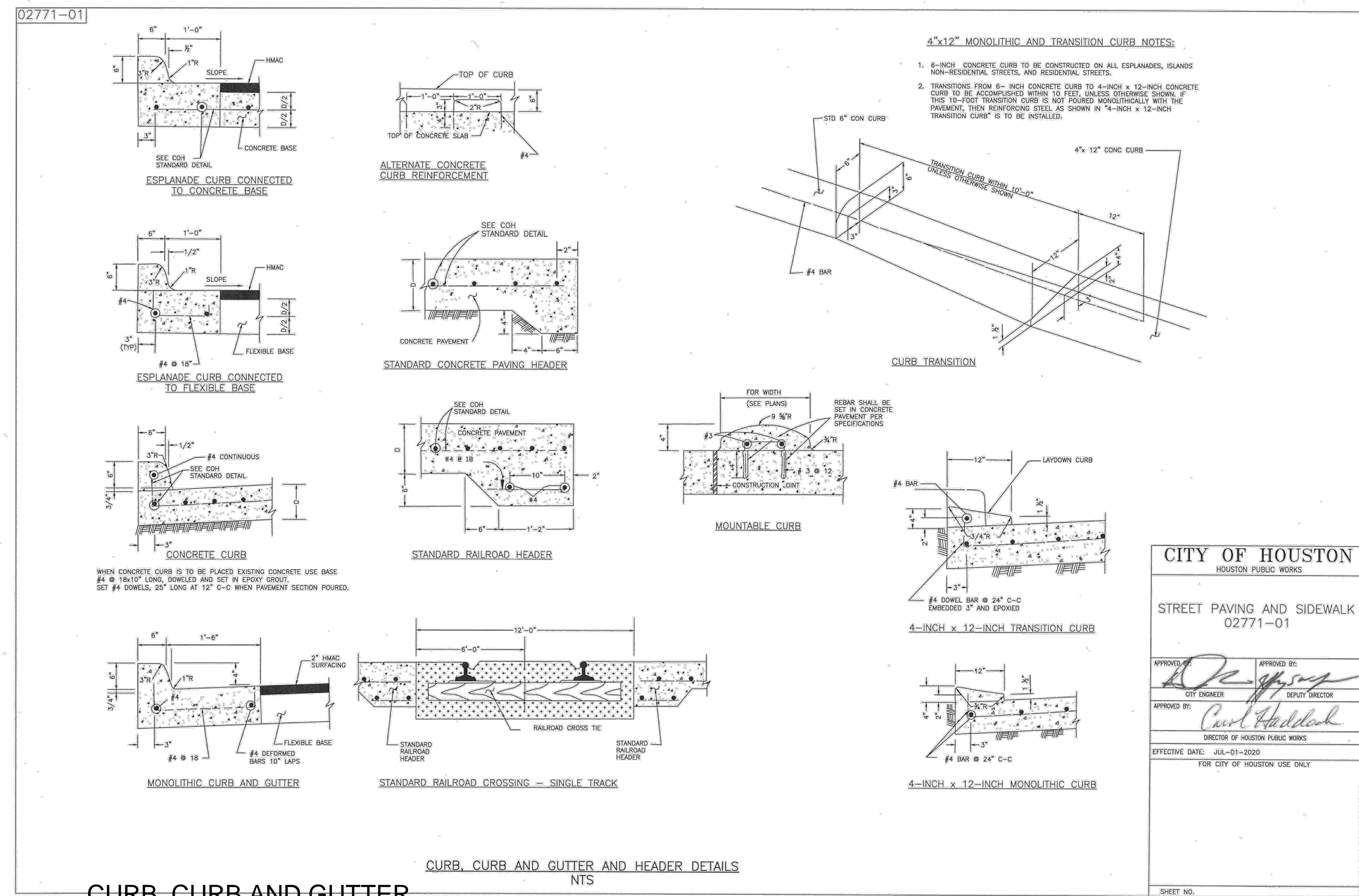


10 SIDEWALK EXPANSION JOINT
SCALE: N.T.S.

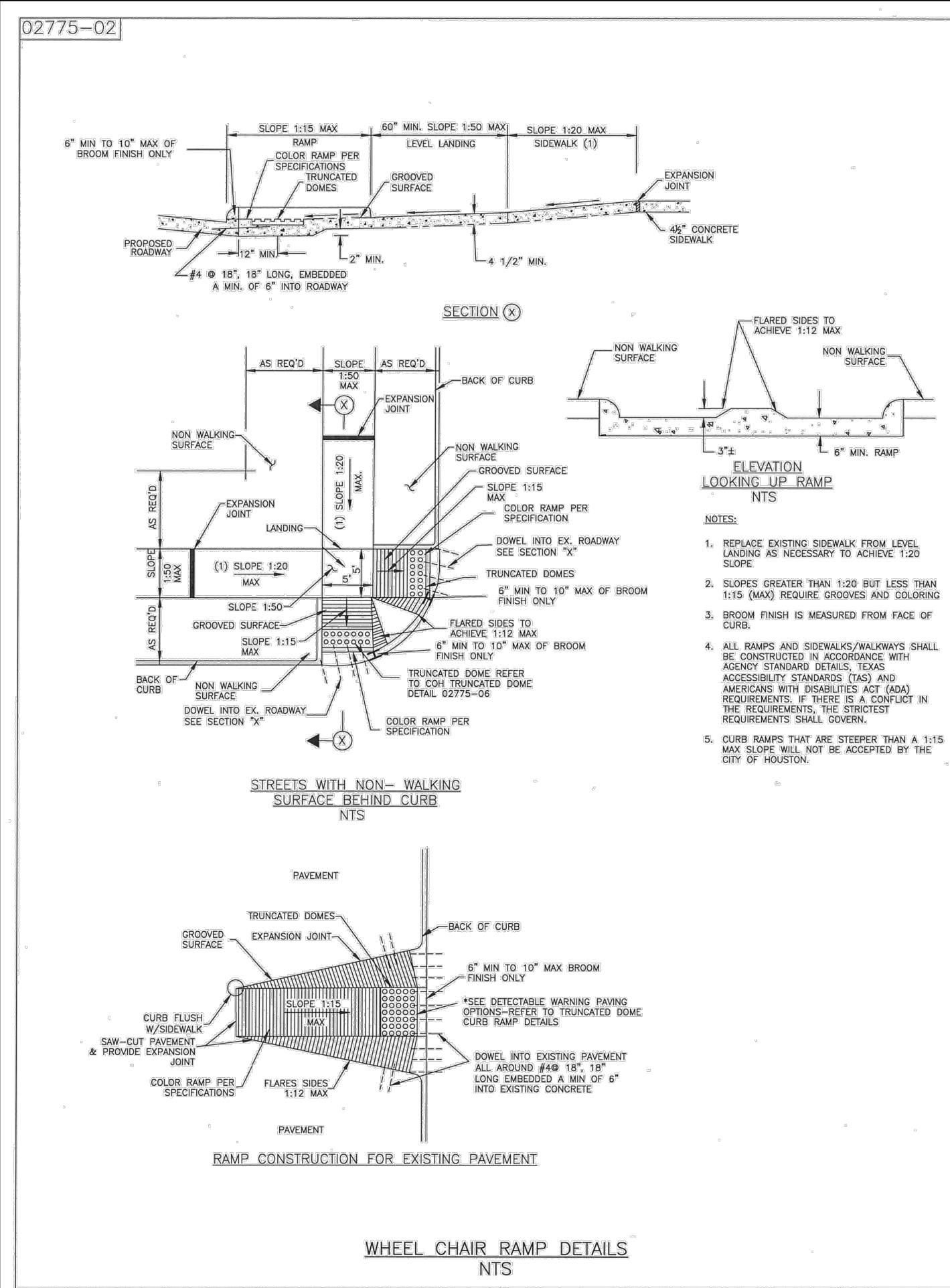


11 SIDEWALK
SCALE: N.T.S.

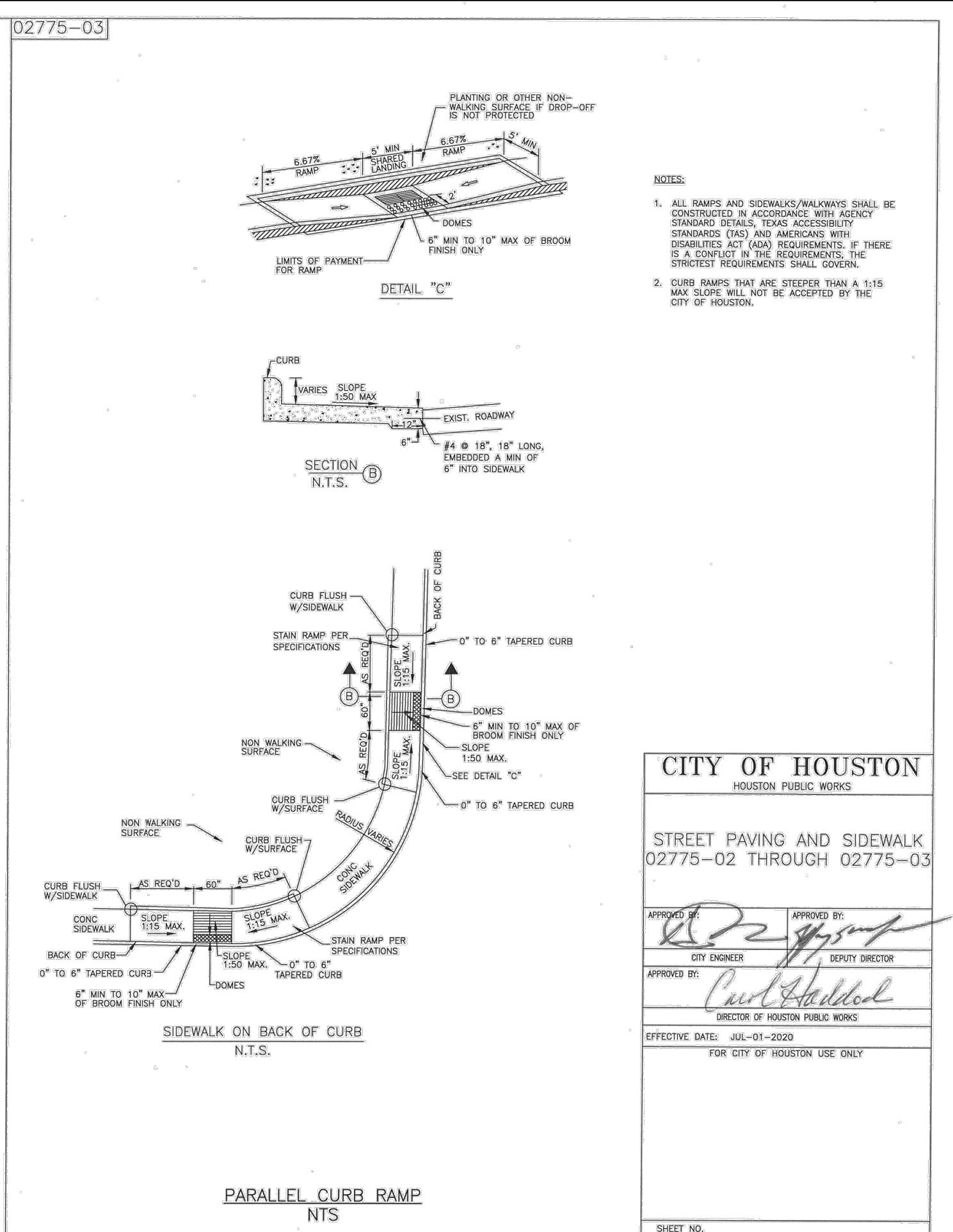
DATE	DESCRIPTION
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1 CURB, CURB AND GUTTER, AND HEADER DETAILS
SCALE: N.T.S.



2 SIDEWALK AND RAMPS ON CORNER DETAIL
SCALE: N.T.S.



talamantes DESIGN
CONSULTANT

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

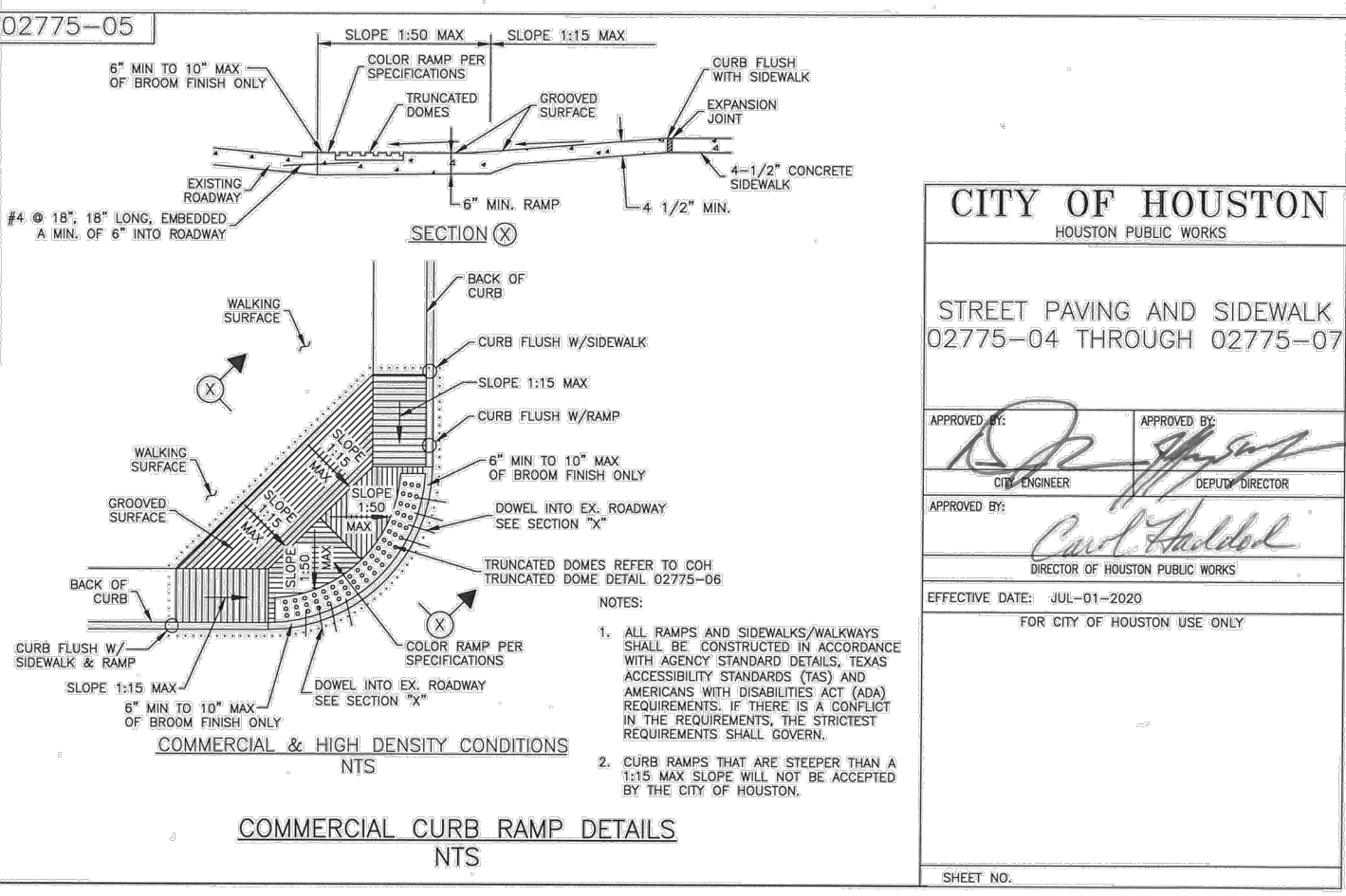
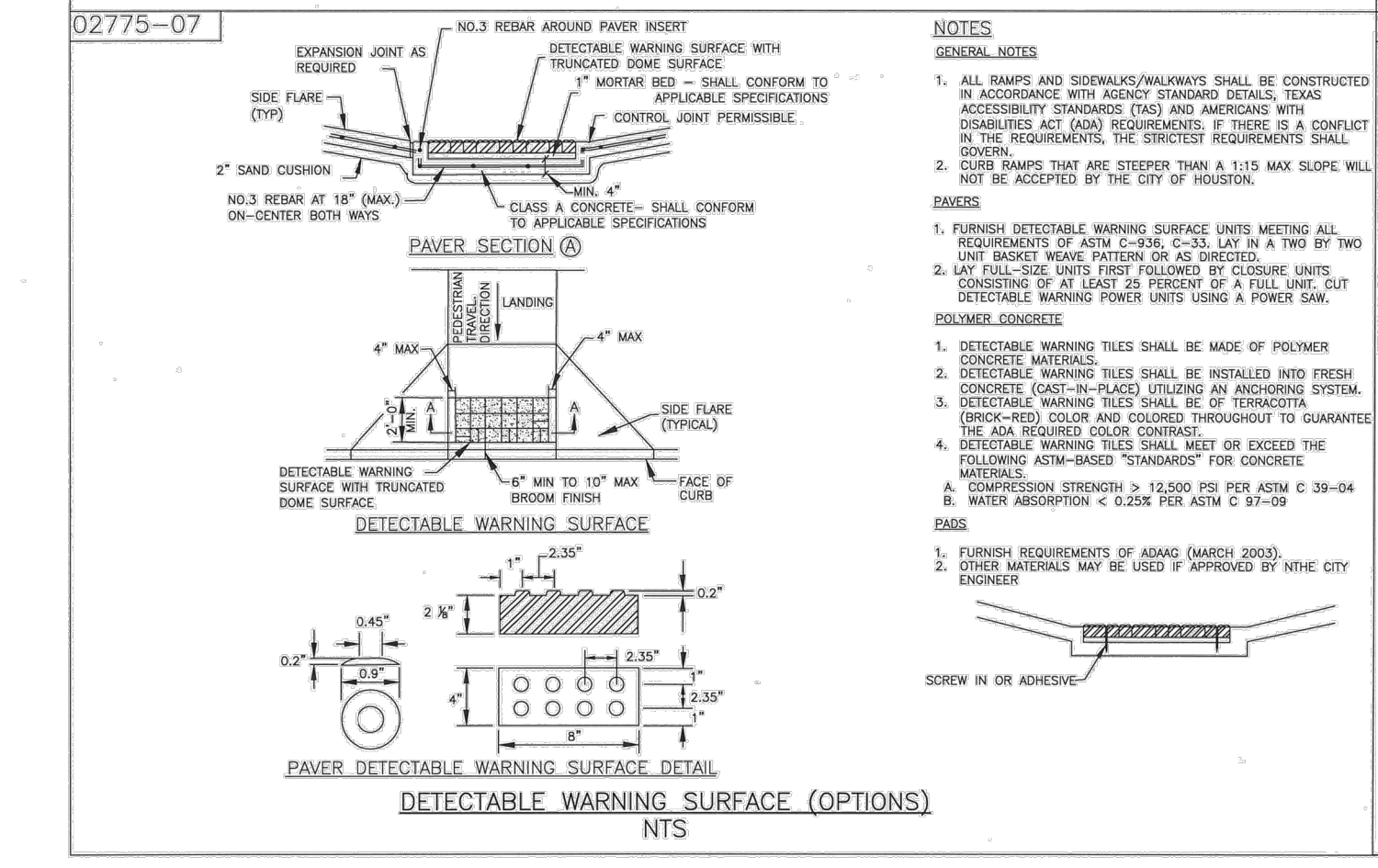
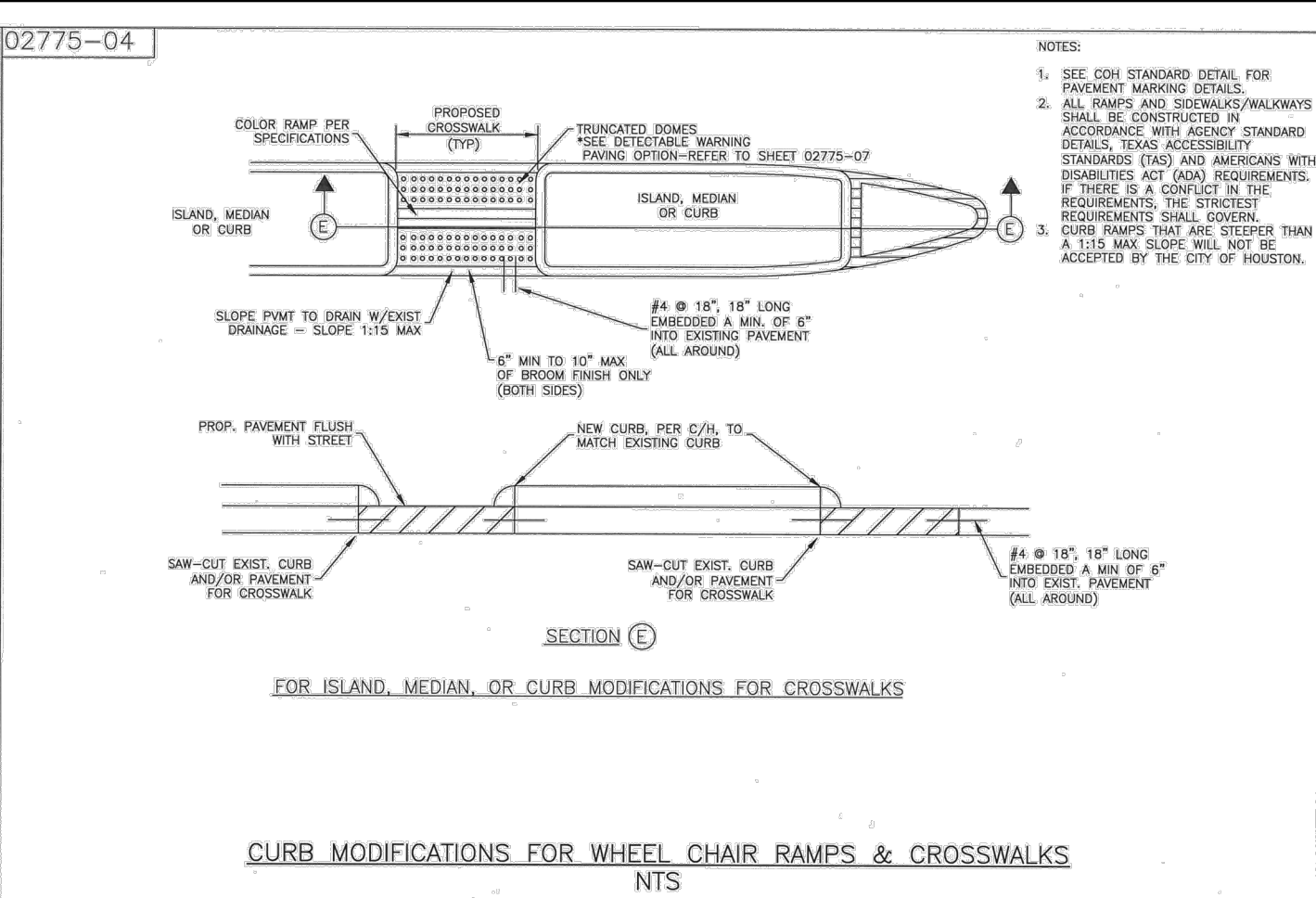
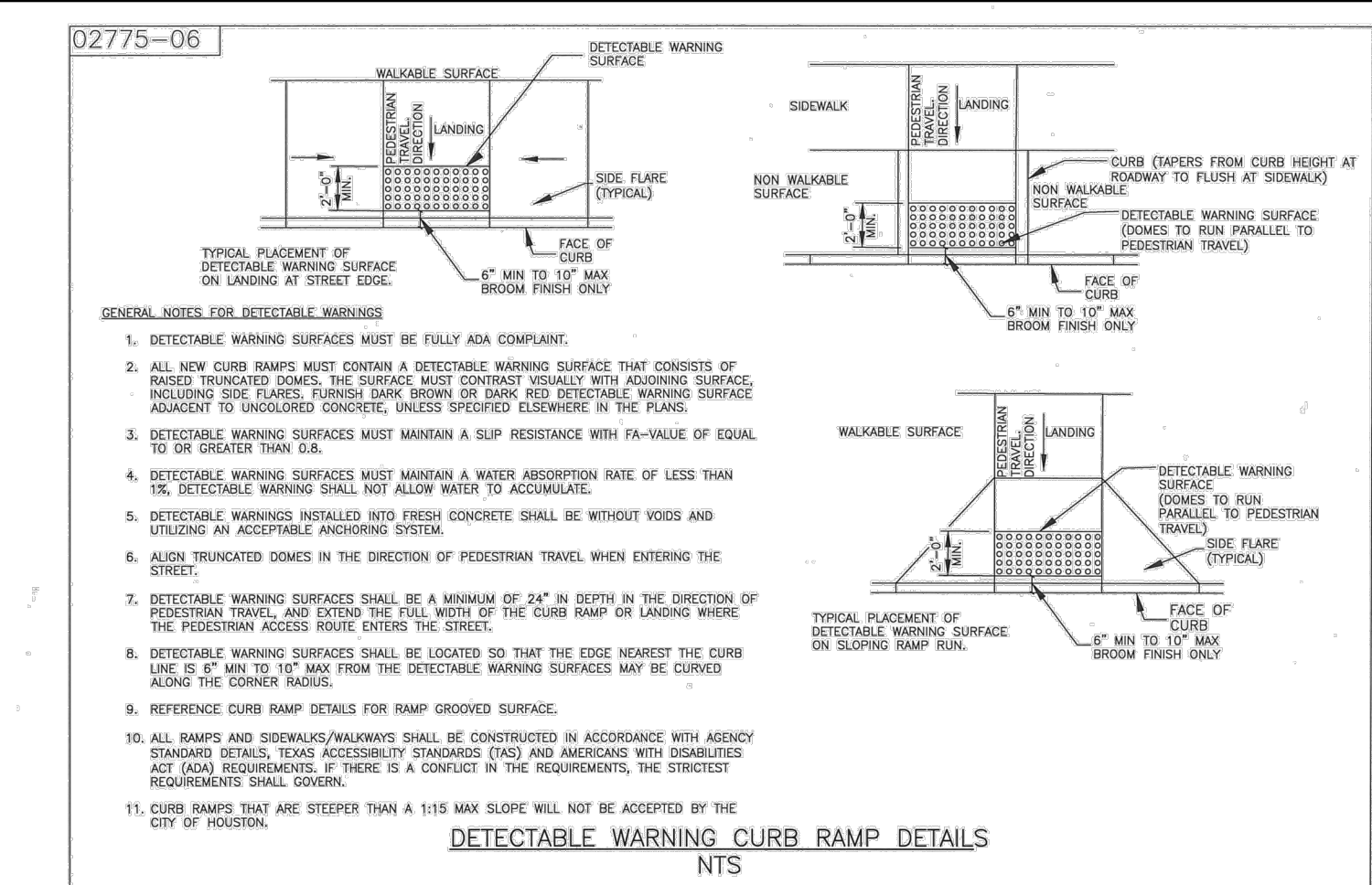
STREET PAVING AND SIDEWALK
02775-02 THROUGH 02775-03

APPROVED BY: [Signature]
CITY ENGINEER

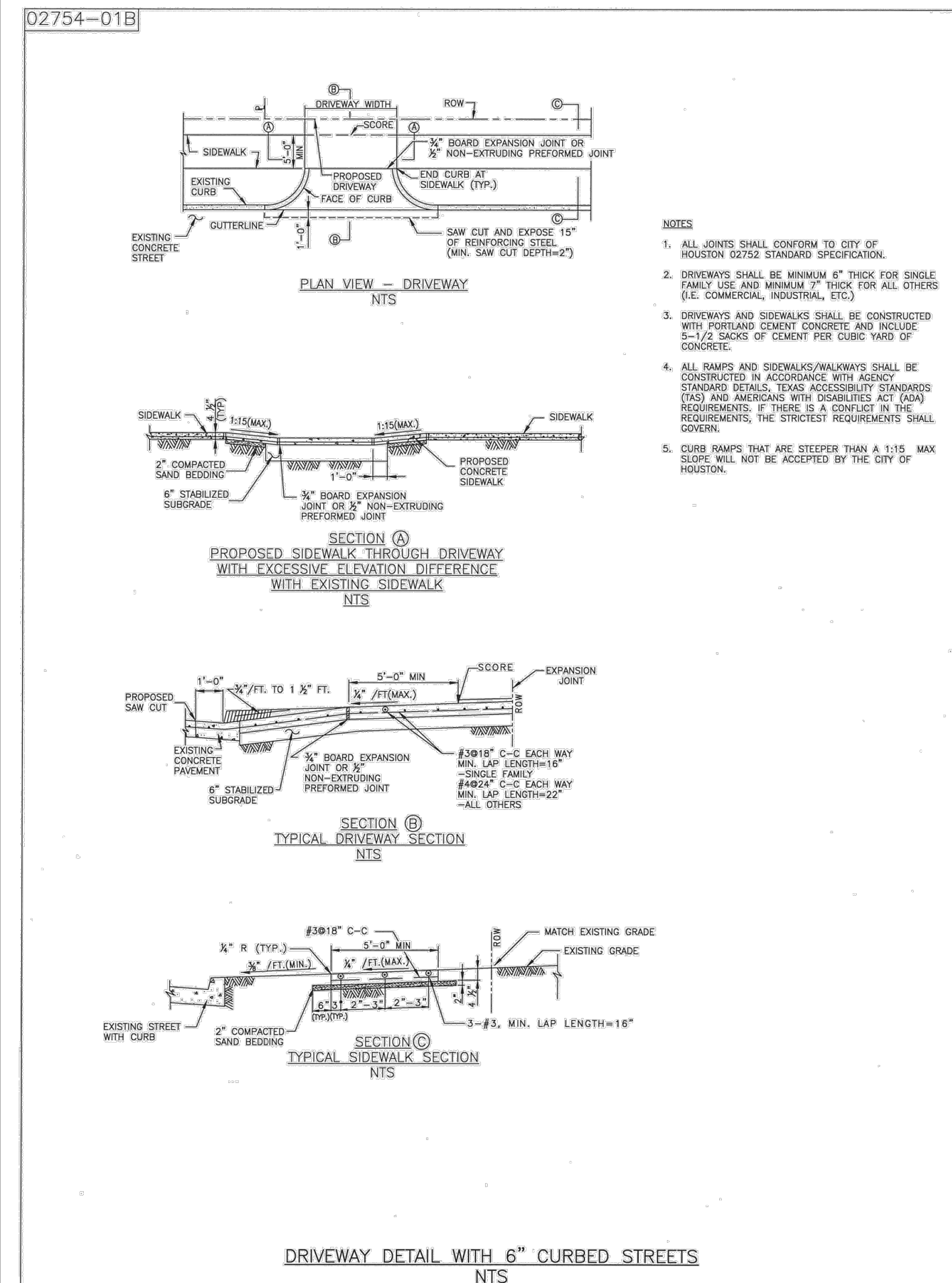
APPROVED BY: [Signature]
DEPUTY DIRECTOR

EFFECTIVE DATE: JUL-01-2020
FOR CITY OF HOUSTON USE ONLY

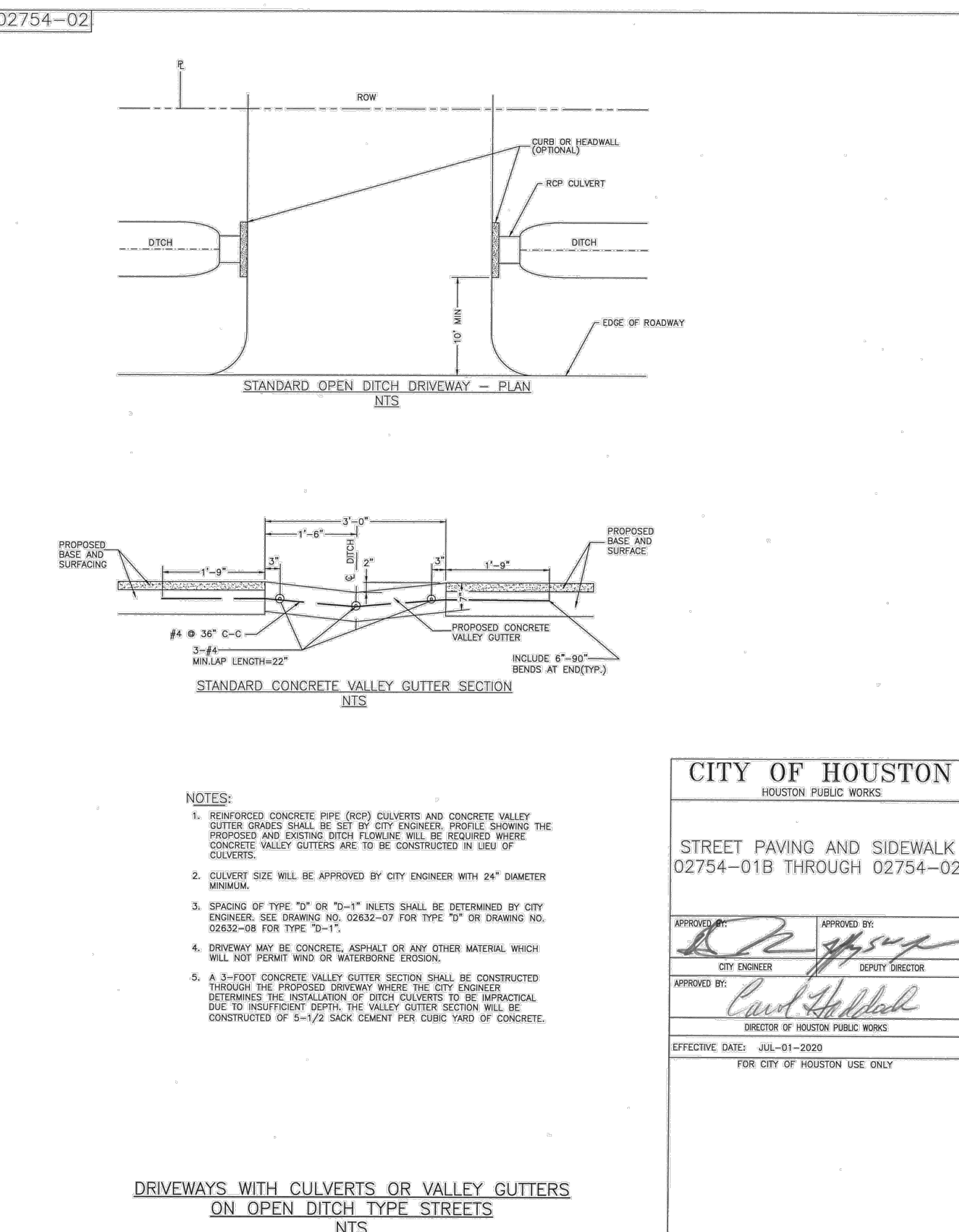
OWNER



3 SIDEWALK AND RAMPS DETAIL
SCALE: N.T.S.



4 DRIVEWAY DETAIL
SCALE: N.T.S.



CITY OF HOUSTON
HOUSTON PUBLIC WORKS

STREET PAVING AND SIDEWALK
02754-01B THROUGH 02754-02

APPROVED BY: [Signature]
CITY ENGINEER

APPROVED BY: [Signature]
DEPUTY DIRECTOR

EFFECTIVE DATE: JUL-01-2020
FOR CITY OF HOUSTON USE ONLY

ISSUE LOG

DATE	DESCRIPTION
PRE	
PMT	
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PROJECT NO:

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DATE OF ISSUE:

SHEET No.

DETAILS

SHEET No.

NEW OFFICE/WAREHOUSE
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HOUSTON TX. 77028

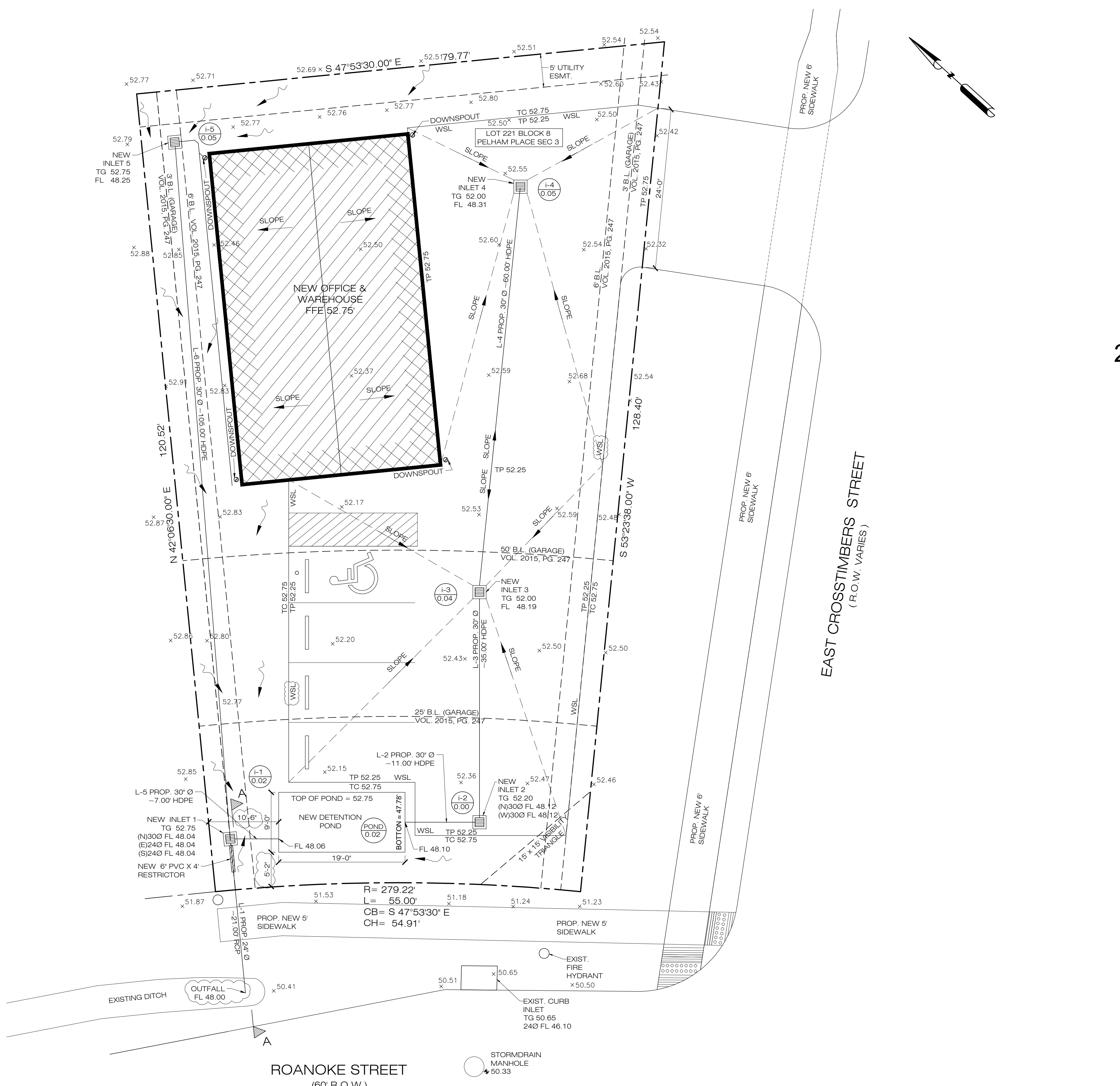
8886 GULF FWY, STE 102
HOUSTON, TX 77017
(281) 888-1711
talamantes.design@yahoo.com

DATE	DESCRIPTION
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PROJECT NO:
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SHEET No.

DRAINAGE PLAN

1/8" = 1'-0"
SHEET No.



- LEGENDS:**
- TBM TEMPORARY BENCHMARK
 - FG FINISHED GRADE
 - FL FLOW LINE
 - GT GUTTER LINE
 - NG NATURAL GRADE
 - TC TOP CURB
 - TG TOP GRATE
 - TP TOP PAVEMENT
 - TS TOP SLAB
 - WSL WATER STORAGE LINE
 - GROUND ELEVATION
 - TYPE 'A' INLET
 - JUNCTION BOX
 - STORM SEWER
 - FLOW DIRECTION
 - PAVEMENT EDGE
 - WATER STORAGE LINE (WSL)
 - DRAINAGE SUB-AREA
 - DRAINAGE SUB-AREA ACREAGE

THE PROPOSED DEVELOPMENT HAS BEEN DESIGNED TO NOT IMPEDE, IMPOUND OR BLOCK THE NATURAL FLOW OF WATER ACROSS ADJACENT AND CONTIGUOUS PROPERTIES.

NOTE: OWNER SHALL BE RESPONSIBILITY FOR THE CREATION AND MAINTAIN OF SAID DETENTION.

NOTE: SUBSURFACE DRAINAGE SYSTEMS ARE REQUIRED TO BE DRAINED IN 48 HOURS.

2 LEGEND
SCALE: N.T.S.

NOTES

1. DRAINAGE SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S 'STANDARD CONSTRUCTION SPECIFICATIONS' DATED OCTOBER 2002 AND 'STANDARD CONSTRUCTION DETAILS FOR STORM DRAINAGE AND STREET PAVING' DATED OCTOBER 2002 UNLESS OTHERWISE NOTED AND APPROVED ON THESE PLANS. THE DESIGN IS CONSISTENT WITH THE MINIMUM STANDARDS ESTABLISHED IN THE 'INFRASTRUCTURE DESIGN' MANUAL DATED OCTOBER 2008.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATED ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY WORK ON THE SITE. THE CONTRACTOR SHALL CONTACT TEXAS ONE CALL: 1-800-245-4545 AT LEAST 48 HOURS IN ADVANCE OF ANY EXCAVATING WITHIN STREET R.O.W.S OR EASEMENTS.
3. ALL WORK, SERVICES AND LABOR SHALL CONFORM TO THE RULES AND REGULATIONS OF THE CITY OF HOUSTON, TEXAS BUILDING CODE.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED TO PERFORM THE WORK.
5. THE LOCATION OF ALL EXISTING IMPROVEMENTS SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING ANY WORK.
6. THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION WHEN WORKING IN THE AREAS WHERE OVERHEAD POWER LINES EXIST SO AS TO AVOID MAKING CONTACT WITH SAID LINES. THE CONTRACTOR SHALL CONTACT CENTERPOINT ENERGY TO ARRANGE FOR ELECTRICAL LINES TO BE TURNED OFF OR MOVED, AS REQUIRED.
7. THE CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS AND STATE OF TEXAS LAW CONCERNING EXCAVATION. TRENCHING AND SHORING AS SPECIFIED IN CITY OF HOUSTON ORDINANCE # 87-1457.

DRAINAGE NOTES

1. ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAMS FLOOD INSURANCE RATE MAP NUMBER 48201G0685L (MAP REVISED JUN 18, 2007). THE SUBJECT LIBRARY SITE IS LOCATED IN UNSHADED ZONE 'X'.
2. THE PROPOSED INTERNAL STORM SEWER SYSTEM WAS DESIGNED UTILIZING THE RATIONAL METHOD AND RAINFALL RUNOFF FROM THE CITY OF HOUSTON TWO YEAR FREQUENCY STORM BASED ON A RUNOFF COEFFICIENT OF 0.50.
3. ALL PROPOSED STORM SEWER AND DRAINAGE STRUCTURE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARD DETAILS, UNLESS NOTED OTHERWISE WITHIN THESE PLANS.
4. ALL OTHERS PRIVATE STORM SEWERS SHALL BE HDPE WITH SOIL TIGHT RUBBER, GASKETED JOINTS, UNLESS OTHERWISE SHOWN ON PLANS.
5. ALL TRENCH BACKFILLS SHALL BE IN 8' LIFTS WITH TESTS TAKEN AT 100 FOOT INTERVALS ON EACH LIFT AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D-698/AASHTO T99).
6. ALL INLETS, MANHOLES, CLEANOUTS AND HEADWALLS SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND. CEMENT STABILIZED SAND FILL SHALL BE AT LEAST 12' ON BOTTOM OF STRUCTURE AND 12' AROUND OUTSIDE OF STRUCTURE. ALL CEMENT STABILIZED SAND USED FOR BEDDING AND BACKFILL MUST MEET OR EXCEED CURRENT CITY OF HOUSTON PERFORMANCE SPECIFICATIONS (100 P.S.I. UNCONFINED COMPRESSIVE STRENGTH 48 HOURS SEE CITY OF HOUSTON STANDARD SPECIFICATIONS SECTION 02252).
7. ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES AND INLETS ARE TO BE PLUGGED WITH 8" STONE WALLS UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL CUT OFF PIPE FLUSH WITH INSIDE FACE OF INLETS AND MANHOLE.
9. CONTRACTOR SHALL PROVIDE UNIFORM GRADING BETWEEN PROPOSED FINISHED GRADE SPOT ELEVATIONS AND CONTOURS. CONTRACTOR SHALL PROVIDE SELECT FILL MATERIAL, AS REQUIRED, TO FACILITATE UNIFORM GRADING ADJUST MANHOLE COVERS TO GRADE CONFORMING TO REQUIREMENTS OF SECTION 02086 ADJUSTING MANHOLES, INLETS AND VALVE BOXES TO GRADE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING, AND RESTORING ANY BACK SLOPE DRAINAGE SYSTEM DISTURBED AS A RESULT OF HIS WORK.
11. ALL DITCHES SHALL BE REGARDED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED.

3 GENERAL NOTES
SCALE: N.T.S.

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

NOTE: OWNER SHALL BE RESPONSIBILITY FOR THE CREATION AND MAINTAIN OF SAID DETENTION.

NOTE: SUBSURFACE DRAINAGE SYSTEMS ARE REQUIRED TO BE DRAINED IN 48 HOURS.

CALCULATION DETENTION

TRACK SIZE AREA =	8265.00	Sq.Ft = 0.1897
DISTURBED AREA =	5591.00	Sq.Ft = 0.1284
PROPOSED (FINAL) IMPERVIOUS AREA =	5591.00	Sq.Ft = 0.1284
VOLUME DETENTION REQUIRED =	0.75	Ac-FVAc
0.1284 x 0.75 =	0.0963	Ac-Ft = 4193.2500 CuFt
VOLUME DETENTION REQUIRED =	4193.2500 CuFt	0.0963 ACFT

VOLUME PROVIDE CALCULATION:

V1 VOLUME - PARKING AREAS
V1 = PARKING LOT AREA @ WATER ELEVATION DIFFERENCE
V1 = 1/2(AREA1)H1 + (AREA1)H2
V1 = 1/2 * 3920.00 * 0.25 + (3920.00 * 0.50)
V1 = 2,286.67 CuFt

V2 VOLUME - AREA OF POND (CUT)
V2 = ((A1 + A2) / 2) x H2
V2 = ((171.00 + 171.00) / 2) x 4.65
V2 = 795.15 CuFt

V3 VOLUME - PIPE AREA
V3 = π PIPE AREA @ LENGTH
V3 = 4.91 SqFt x 218.00 Ft
V3 = 1,070.38 CuFt

V3 VOLUME - INLET
V3 = AREA INLET x HIGH x INLETS
V3 = 6.25 SqFt x 3.75 Ft x 5.00
V3 = 117.19 CuFt

VOLUME PROVIDED
V = V1 + V2 + V3
V = 2,286.67 + 795.15 + 1,070.38 + 117.19
V = 4,269.38 CuFt

PROVIDE DETENTION VOLUME	4,269.38 CuFt	0.0980 ACFT	>	REQUIRED DETENTION VOLUME	4193.2500 ACFT	0.0963 ACFT
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1 DRAINAGE CALCULATION
SCALE: N.T.S.

LOW LEVEL RESTRICTOR (25% FLOW)

TOTAL DRAINAGE AREA = 0.1172 ACRES
OUTFLOW RATE ALLOWED FOR LOW FLOW QL1 = 0.50 CFS/AC X 0.1172 AC = 0.0586 CFS
QL1 = 0.0586 CFS
PRIMARY H = HEAD (FEET) = 52.00 - 48.04 = 3.96 FEET

HEAD HL1 (WATER SURFACE DIFFERENTIAL) FOR LOW FLOW
D = $\frac{2.25 \times H^{1/4}}{(0.0586)^{1/2}}$
HL1 = $\frac{3.96 - 0.25}{(0.0586)^{1/2}}$
D = $\frac{2.25 \times (3.71)^{1/4}}{(0.0586)^{1/2}}$
D = 0.08 FT = 0.93 IN
PROPOSED LOW LEVEL RESTRICTOR = 6"Ø

HIGH LEVEL RESTRICTOR (100% FLOW)

TOTAL DRAINAGE AREA = 0.1172 ACRES
OUTFLOW RATE ALLOWED FOR HIGH FLOW QL1 = 2.0 CFS/AC X 0.1172 AC = 0.2344 CFS
QL2 = 0.2344 CFS

HEAD HL2 (WATER SURFACE DIFFERENTIAL) FOR HIGH FLOW
PRIMARY H = HEAD (FEET) = 52.75 - 48.04 = 4.71 FEET
HL2 = $\frac{4.71 - 0.25}{(0.2344)^{1/2}}$
D = $\frac{2.25 \times (4.46)^{1/4}}{(0.2344)^{1/2}}$
D = 0.15 FT = 1.78 IN
PROPOSED LOW LEVEL RESTRICTOR = 6"Ø

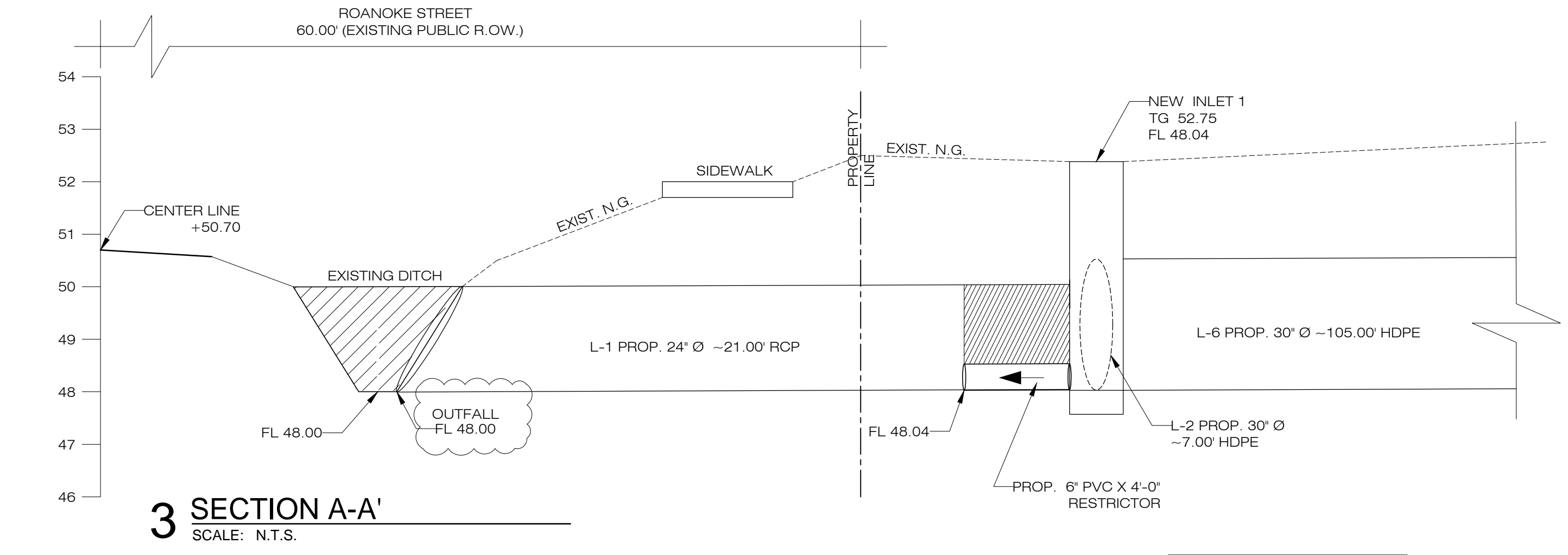
MAXIMUM FLOW TRUE 6 INCH RESTRICTOR
Q = CA(2g)^(1/4) H
Q = 0.80 x 20^(1/4) x 32.2 x 4.46 = 2.7116 CFS
Q = 2.7116 CFS

RESTRICTOR COMPARISON

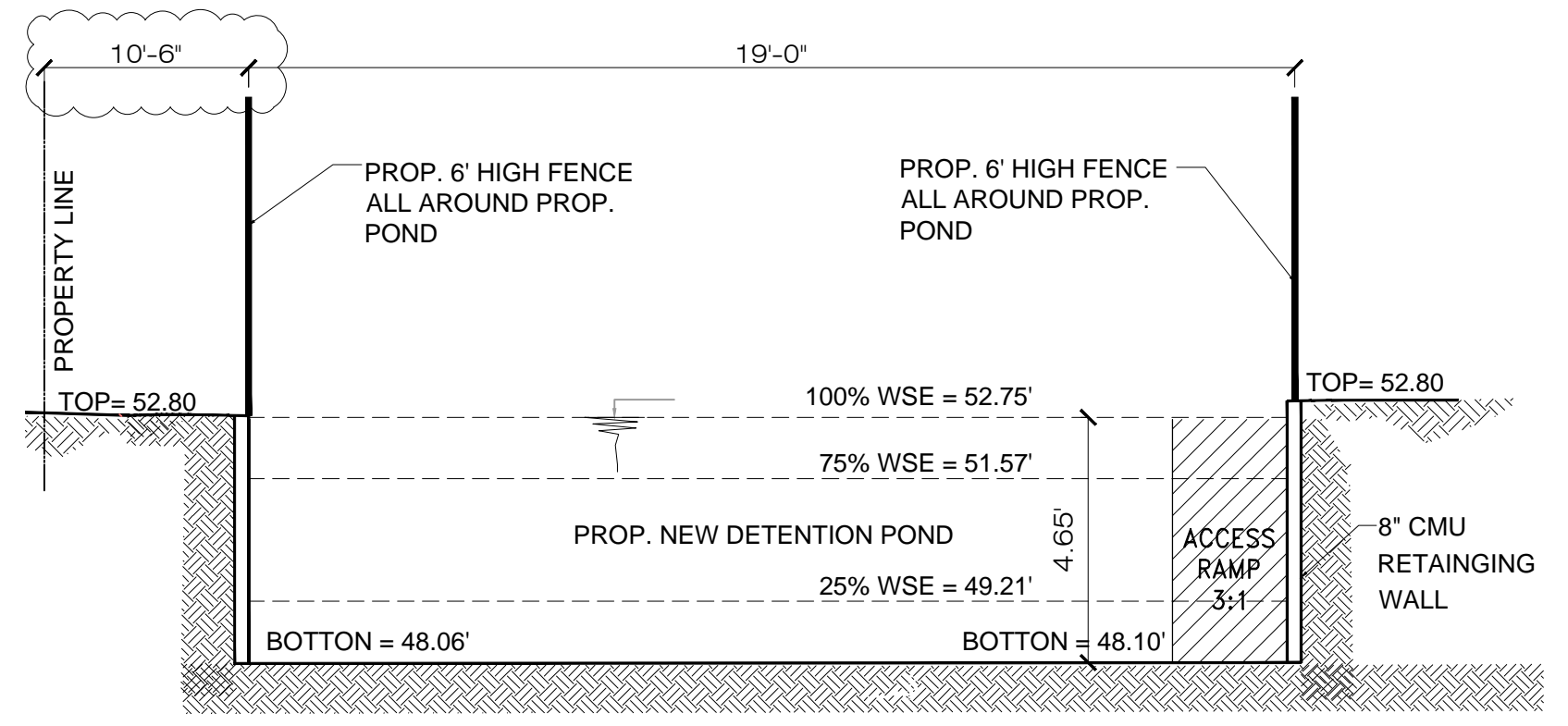
100% VS 25% Q (100% FLOW)	25% PIPE DIA	(FEET)	(INCHES)
Q (100% FLOW) = 0.2344	100% PIPE DIA	0.15	1.78
Q (25% FLOW) = 0.0586	25% PIPE DIA	0.08	0.93
MAX. FLOW = 2.7116	2ND RESTRICTOR	0.50	6.0
	2ND RESTRICTOR	NO	

FLOW THRU 6 INCH RESTRICTOR > HIGH Q. THEREFORE, 2.7116 CFS > 0.2344 CFS
SECONDARY RESTRICTOR NOT IS REQUIRED

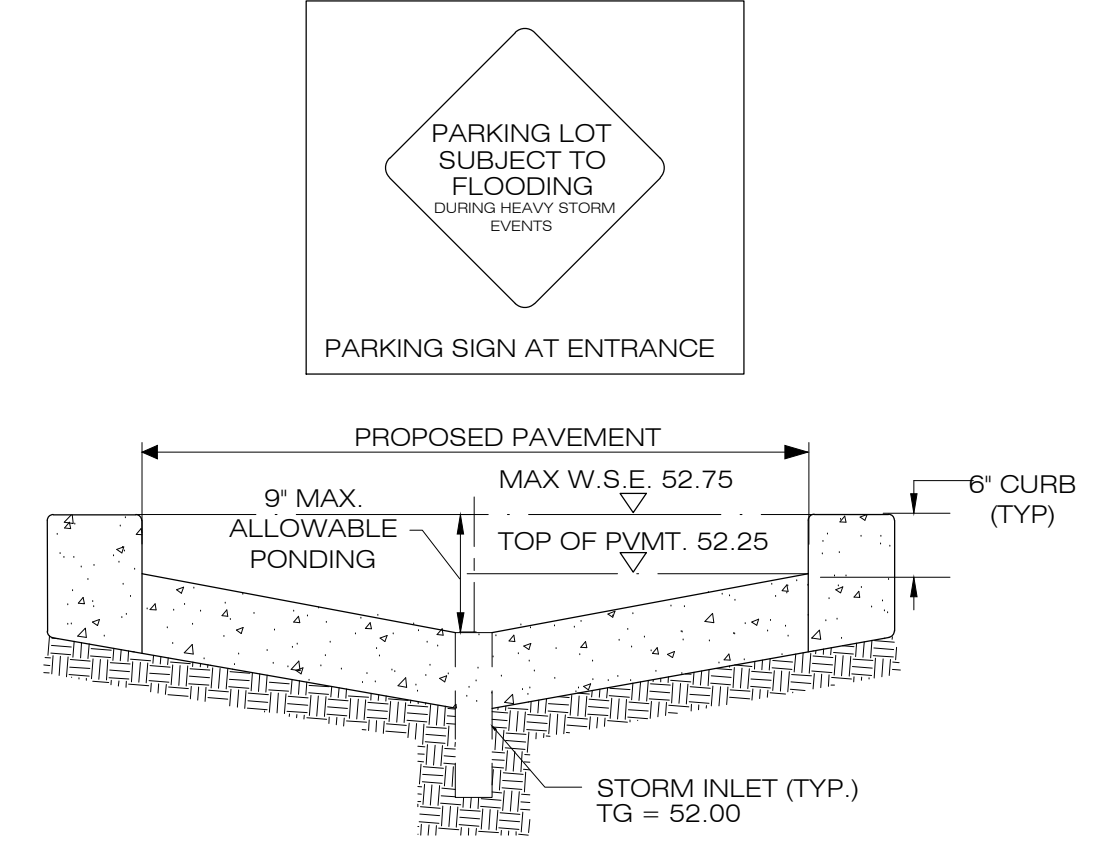
2 RESTRICTOR OUTLET CALCULATION
SCALE: N.T.S.



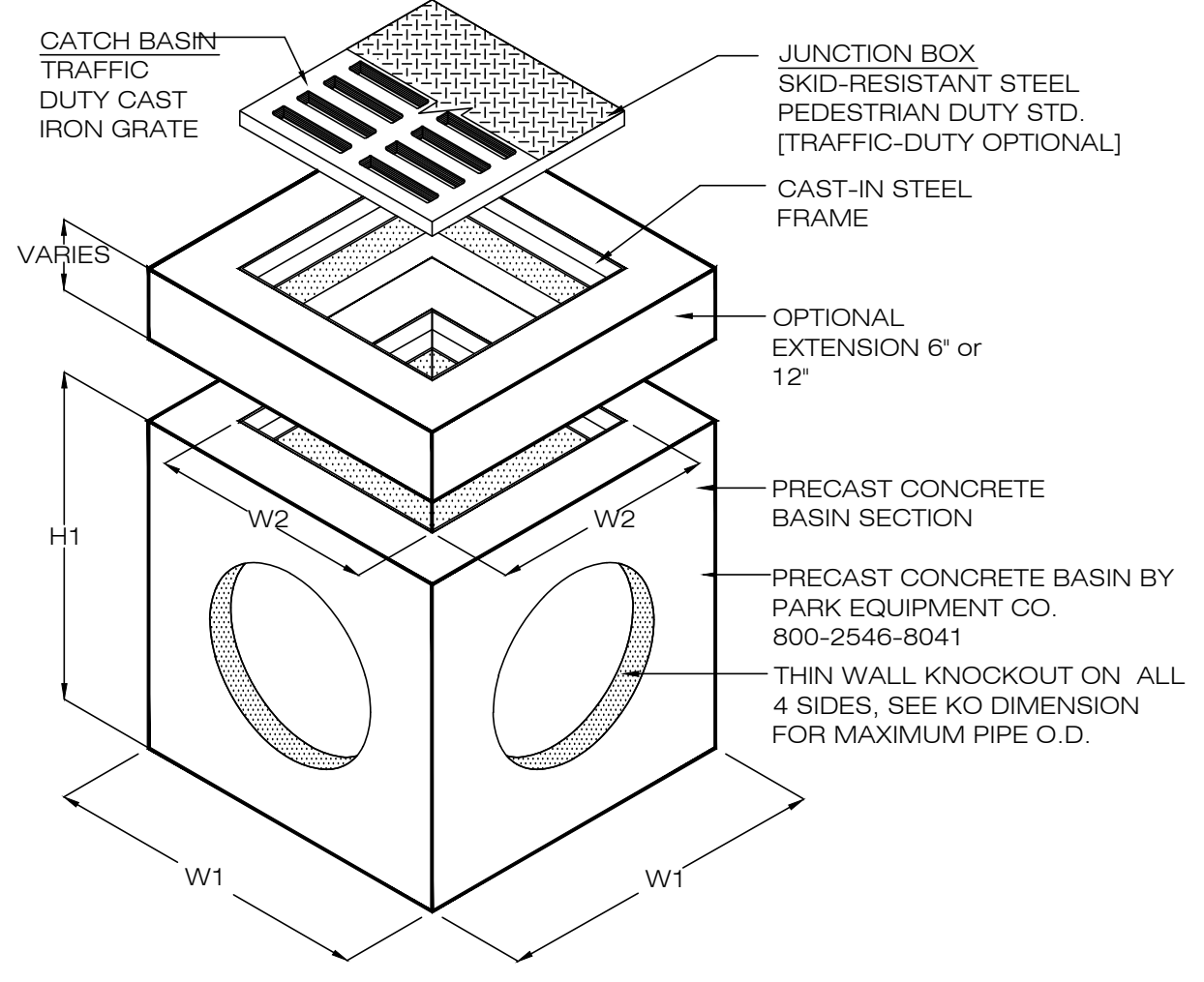
3 SECTION A-A'
SCALE: N.T.S.



4 SECTION OF POND
SCALE: N.T.S.



6 TYPICAL PAVEMENT SECTION
SCALE: N.T.S.



SPECIFICATIONS:

CONCRETE: CLASS 1 CONCRETE WITH OF DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR AND FIRST STAGE OF WALL WITH SECTIONAL RISER TO REQUIRED DEPTH.

REINFORCEMENT: GRADE 60 REINFORCED. STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

C.I. CASTINGS:

MODEL #	CATCH BASIN	JUNCTION BOX	DIMENSIONS						GRATE SIZE	WEIGHT LBS
			W1	W2	H1	H2	T1	KO		
CB12	JB12		15"	10"	21"	18"	2"	10"	12"x12"x1"	180
CB18	JB18		24"	16"	34"	30"	4"	15"	18"x18"x1"	1,000
CB20	JB20		26"	18"	34"	30"	4"	17"	20"x20"x1"	1,335
CB24	JB24		32"	22"	41"	36"	5"	22"	24"x24"x2"	2,245
CB27	JB27		37"	25"	42"	36"	6"	24"	27"x27"x2"	2,875
CB30	JB30		42"	30"	42"	36"	6"	30"	32"x32"x2"	3,675
CB36	JB36		48"	36"	42"	36"	6"	32"	38"x38"x2"	4,585

1. CB12 CATCHBASIN IS RATED FOR PEDESTRIAN LOADING. ALL OTHERS ARE TRAFFIC DUTY.
2. ALL JUNCTION BOXES ARE STANDARD PEDESTRIAN DUTY OR OPTIONAL TRAFFIC DUTY.

9 PRECAST CONCRETE CATCHBASIN/JUNCTION BOX
SCALE: N.T.S.

(1) ALLOWABLE DISCHARGE:
ROAD FRONTAGE = 128.40 FT
ALLOWABLE OUTFALL RATE = 0.0088 CFS/FT
ALLOWABLE Q = 0.0088 CFS/FT X 128.40 FT
Q_{Allowable} = 1.1299 CFS

(2) RUN OFF CALCULATION
(2.1) RAINFALL INTENSITY

$$I = \frac{b}{(d+TC)^e}$$

TC = TIME OF CONCENTRATION
TC = 10 A^{0.1761} + 15
A = LOTS AREA
b, d, e = COEFFICIENTS FROM SECTION 6 DRAINAGE REQUIREMENT, HARRIS COUNTY REGULATIONS
b, d, e = COEFFICIENTS FROM SECTION 6

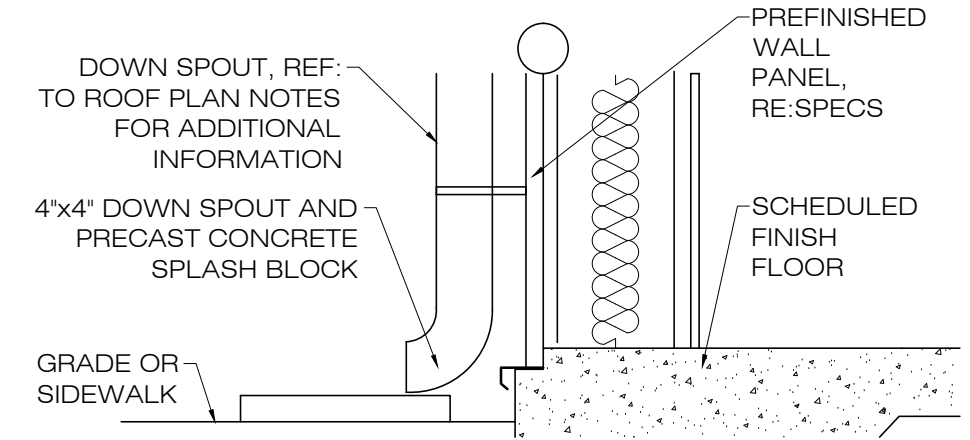
Years	b	d	e
2	48.35	9.07	0.7244
100	60.66	4.44	0.5797

$$I = \frac{48.35}{2^{0.7244} (9.07 + 22.42)^{0.5797}} = 3.97$$

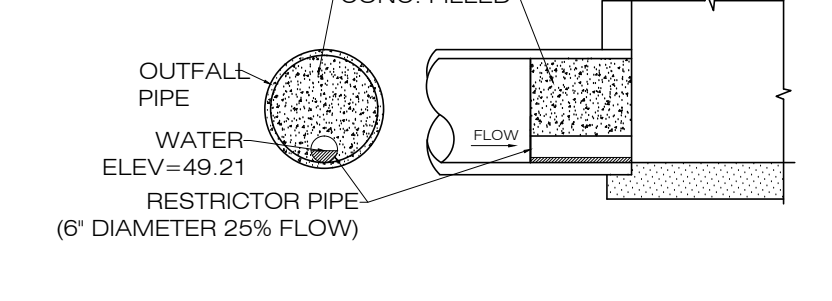
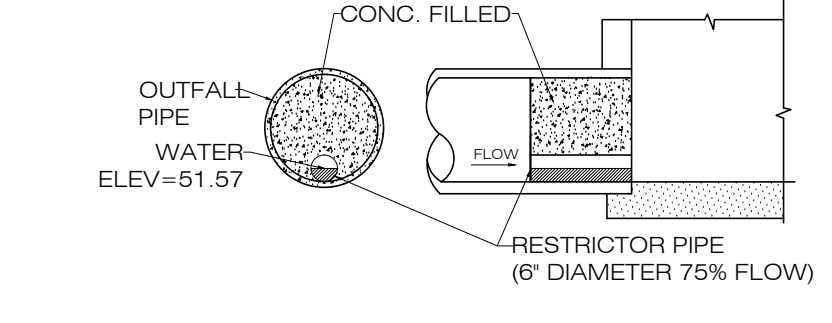
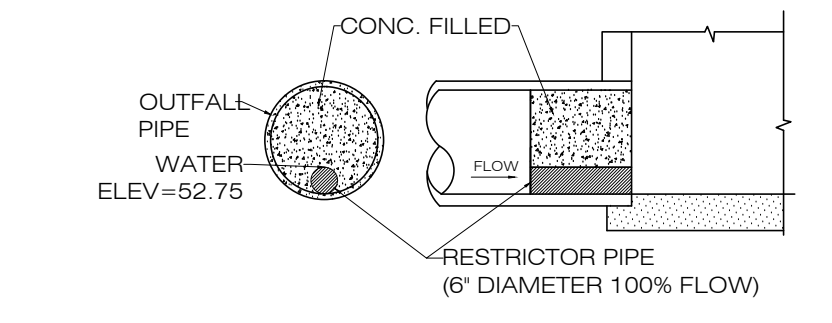
$$I = \frac{60.66}{100^{0.5797} (4.44 + 22.42)^{0.5797}} = 9.00$$

(2.1) REQUIRED VOLUME

V = Q x TC
Q = C x I x A
C = WATERSHED IMPERVIOUS COEFFICIENT
C = 0.80
A = 0.1845 ACRES
I = 3.97 (2 YEARS FREQUENCY)
I = 9.00 (100 YEARS FREQUENCY)
Q_{2 years} = 0.80 x 3.97 x 0.1845 = 0.5859 CFS
V_{2 years} = 0.5859 x 22.42 x 60 = 788.1526 Cu Ft
Q_{100 years} = 0.80 x 9.00 x 0.1845 = 1.3284 CFS
V_{100 years} = 1.3284 x 22.42 x 60 = 1,786.9636 Cu Ft



7 DOWNSPOUT DETAIL
SCALE: N.T.S.



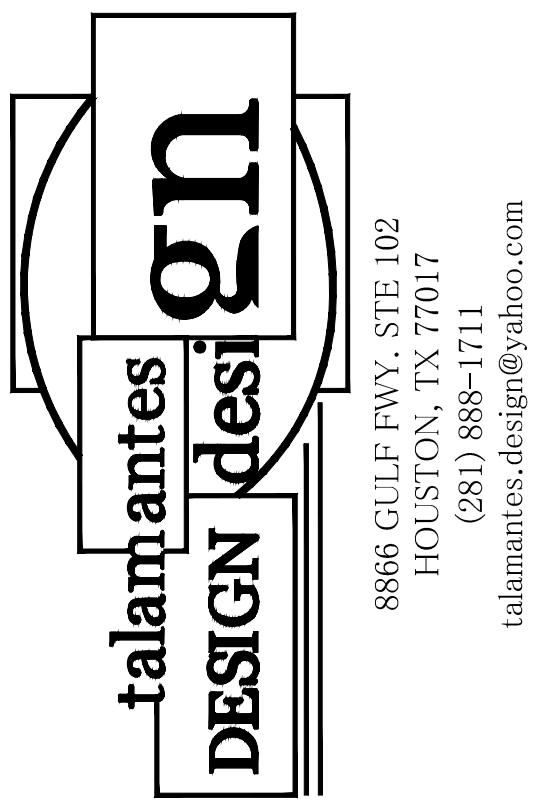
8 RESTRICTOR DETAIL (25% & 100% FLOW)
SCALE: N.T.S.

STORM SEWER 100 YR FREQUENCY RAINFALL

# PIPE LINE	FROM INLET TO INLET	DRAINAGE AREA (FT)	DRAINAGE AREA (ACRES)	TOTAL D.A. (ACRES)	RUNOFF COEFF. C	TOTAL TC (MIN)	I INTENSITY 100YR (INCH/HR)	INCREMENTAL FLOW "Q" (cfs)	TOTAL 100YR FLOW Q (cfs)	PIPE REACH (FT)	DIA. OF PIPE (IN)	PIPE SLOPE (%)	Manning roughness coefficient "n"	PIPE CAPACITY (cfs)	DESIGN VELOCITY (fps)	FLOWLINE ELEV UPSTR (ft)	FLOWLINE ELEV DOWNSTR (ft)	VELOCITY 100YRS (FPS)	Vp/2g	H & SLOPE	TOTAL HEAD LOSS (ft)	ENERGY GRADE LINE (ft)	HYDRAULIC GRADE LINE (ft)	SURFACE ELEV. (ft)	
L4	I-5	I-1	2180.000	0.05	0.0500	0.80	20.90	9.31	0.37	0.37	105.00	30.00 in	0.20%	0.013	18.32	3.74	48.25	48.04	2.31	0.083	0.525	0.608	48.942	48.858	52.750
L3	I-4	I-3	2372.000	0.05	0.0545	0.80	20.99	9.29	0.40	0.40	60.00	30.00 in	0.20%	0.013	18.32	3.74	48.31	48.19	1.14	0.020	0.660	0.680	49.011	48.990	52.000
L6	I-3	I-2	1900.000	0.04	0.0981	0.80	21.64	9.16	0.32	0.72	35.00	30.00 in	0.20%	0.013	18.32	3.74	48.19	48.12	1.31	0.027	0.105	0.132	48.349	48.322	52.000
L5	I-2	POND	0.000	0.00	0.0981	0.80	21.64	9.16	0.00	0.72	11.00	30.00 in	0.18%	0.013	17.47	3.56	48.12	48.10	1.40	0.031	0.077	0.108	48.258	48.228	52.200
L2	POND	I-1	705.000	0.02	0.1143	0.80	21.82	9.12	0.12	0.84	7.00	30.00 in	0.29%	0.013	21.90	4.47	48.06	48.04	1.63	0.042	0.490	0.532	48.633	48.592	52.750
L1	I-1	OUT	1108.000	0.03	0.1897	0.80	22.46	9.00	0.18	1.40	21.00	24.00 in	0.19%	0.011	11.66	3.71	48.04	48.00	2.59	0.105	0.420	0.525	48.630	48.525	48.000

STORM SEWER 2 YR FREQUENCY RAINFALL

# PIPE LINE	FROM INLET TO INLET	DRAINAGE AREA (FT)	DRAINAGE AREA (ACRES)	TOTAL D.A. (ACRES)	RUNOFF COEFF. C	TOTAL TC (MIN)	I INTENSITY 2YR (INCH/HR)	INCREMENTAL FLOW "Q" (cfs)	TOTAL 2YR FLOW Q (cfs)	PIPE REACH (FT)	DIA. OF PIPE (IN)	PIPE SLOPE (%)	Manning roughness coefficient "n"	PIPE CAPACITY (cfs)	DESIGN VELOCITY (fps)	FLOWLINE ELEV UPSTR (ft)	FLOWLINE ELEV DOWNSTR (ft)	VELOCITY 2YRS (FPS)	Vp/2g	H & SLOPE	TOTAL HEAD LOSS (ft)	ENERGY GRADE LINE (ft)	HYDRAULIC GRADE LINE (ft)	SURFACE ELEV. (ft)	
L4	I-5	I-1	2180.000	0.05	0.0500	0.80	20.90	4.12	0.16	0.16	105.00	30.00 in	0.20%	0.013	18.32	3.74	48.25	48.04	2.31	0.083	0.311	0.394	48.728	48.644	52.750
L3	I-4	I-3	2372.000	0.05	0.0545	0.80	20.99	4.11	0.18	0.18	60.00	30.00 in	0.20%	0.013	18.32	3.74	48.31	48.19	1.14	0.020	0.558	0.578	48.909	48.888	52.000
L6	I-3	I-2	1900.000	0.04	0.0981	0.80	21.64	4.05	0.14	0.32	35.00	30.00 in	0.20%	0.013	18.32	3.74	48.19	48.12	1.31	0.027	0.049	0.076	48.293	48.266	52.000
L5	I-2	POND	0.000	0.00	0.0981	0.80	21.64	4.05	0.00	0.32	11.00	30.00 in	0.18%	0.013	17.47	3.56	48.12	48.10	1.40	0.031	0.044	0.075	48.225	48.195	52.200
L2	POND	I-1	705.000	0.02	0.1143	0.80	21.82	4.03	0.05	0.37	7.00	30.00 in	0.29%	0.013	21.90	4.47	48.06	48.04	1.63	0.042	0.314	0.356	48.457	48.416	52.750
L1	I-1	OUT	1108.000	0.03	0.1897	0.80	22.46	3.97	0.08	0.62	21.00	24.00 in	0.19%	0.011	11.66	3.71	48.04	48.00	2.59	0.105	0.242	0.346	48.451	48.346	48.000



CONSULTANT

OWNER

NEW OFFICE/WAREHOUSE
6817 ROANOKE ST.
HOUSTON TX. 77028

ISSUE LOG

DATE	DESCRIPTION
PRE	
PMT	

PROJECT NO:

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DATE OF ISSUE:

SHEET No.

DRAINAGE DETAIL

SHEET No.

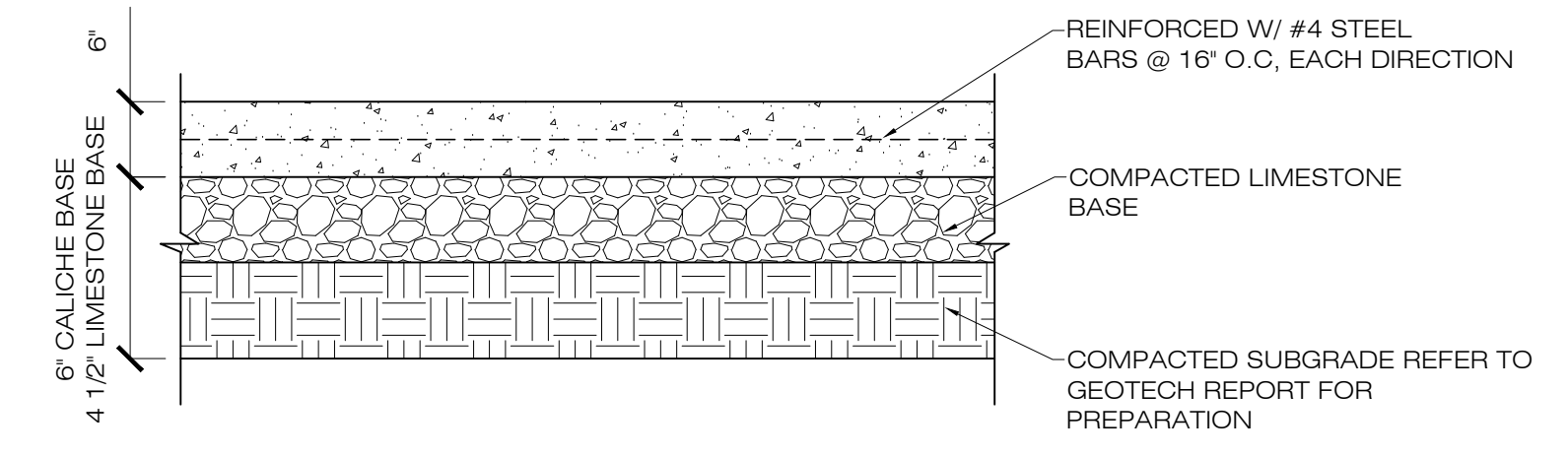
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SHEET No.

GRADING PLAN

1/8" = 1'-0"
SHEET No.

C4.0



3 CONCRETE PAVEMENT
SCALE: N.T.S.

GENERAL NOTES-PAVING

- PROTECTION OF EXISTING IMPROVEMENTS: THE CONTRACTOR SHALL TAKE CARE NOT TO DISTURB EXISTING UTILITIES, BUILDING FOUNDATION OR OTHER SITE STRUCTURES DURING PAVEMENT OPERATIONS.
- SUBGRADE PREPARATION: PREPARATION OF SUBGRADE UNDER PAVED AREAS SHALL BE PERFORMED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' SPECIFICATIONS OR THE GEOTECHNICAL REPORT, THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY.
 - A) PREPARATION OF THE SUBGRADE FOR PAVING WITHIN RIGHT-OF-WAY, ACCESS EASEMENTS AND/OR FIRE LANES SHALL NOT BE INITIATED UNTIL ALL TESTING OF UNDERGROUND UTILITIES HAS BEEN COMPLETED AND VERIFIED TO MEET THE GOVERNING AUTHORITIES' SPECIFICATIONS AND AUTHORIZATION TO PROCEED HAS BEEN RECEIVED FROM THE INSPECTOR.
 - B) PAVEMENT SUBGRADE SHALL NOT BE ALLOWED TO RETAIN WATER, WET MATERIAL SHALL BE REMOVED TO DRY, SOUND MATERIAL AND APPROPRIATE DENSITY ACHIEVED PRIOR TO PAVING OPERATIONS.
- PROOF-ROLL SUBGRADE: THE SUBGRADE SHALL BE PROOF-ROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT OR PUMPING AREAS SHALL BE EXCAVATED TO FIRM SUBGRADE AND BACKFILLED AND RE-COMPACTED IN CONFORMANCE WITH THE GEOTECHNICAL REPORT.
- HYDRATED LIME: HYDRATED LIME (IF REQUIRED) SHALL MEET THE REQUIREMENTS OF TxDOT ITEM 260. LIME TREATMENT USED AS SUBGRADE. LIME SHALL BE APPLIED AT THE RATE OF 6% BY WEIGHT, THOROUGHLY MIXED AND BLENDED WITH THE TOP 6" OF SUBGRADE AND UNIFORMLY COMPACTED TO A MINIMUM OF 100 PERCENT OF STANDARD PROCTOR (ASTM D698) DETERMINED BY THAT TEST. LIME STABILIZATION SHALL EXTENDED ONE FOOT OUTSIDE THE LIMITS OF THE PAVED AREA. IT SHOULD BE PROTECTED AND MAINTAINED IN A MOIST CONDITION UNTIL THE PAVEMENT IS PLACED.
- REINFORCING BARS: ALL REINFORCING BARS SHALL BE GRADE 40 KSI DEFORMED REINFORCING STEEL SIZE AND SPACING SHALL BE IN ACCORDANCE WITH THE DETAILS.
- BAR CHAIRS: ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS OR OTHER APPROVED SUPPORT.
- CONNECTION TO EXISTING PAVEMENT: WHERE PROPOSED PAVEMENT TO EXISTING PAVEMENT IS TO BE CONSTRUCTED BY THE CONTRACTOR, AT LEAST 15' OF REINFORCING STEEL SHALL BE EXPOSED FROM THE EXISTING PAVEMENT, OR THE CONTRACTOR SHALL PROVIDE HORIZONTAL DOWEL BARS PER THE DETAILS.
- TESTING: SAMPLES FOR STRENGTH TESTS OF THE CONCRETE PAVEMENT WILL BE TAKEN BY THE GEOTECHNICAL ENGINEER TO VERIFY DESIGN STRENGTH. PAVEMENT AREAS FOUND TO BE DEFICIENT IN STRENGTH SHALL BE REMOVED AND REPLACED SOLELY AT THE EXPENSE OF THE CONTRACTOR. THE GEOTECHNICAL ENGINEER SHALL ALSO RANDOMLY CORE THE PAVEMENT TO VERIFY THE THICKNESS OF CONCRETE. ANY AREA FOUND TO BE DEFICIENT IN THICKNESS SHALL BE REMOVED AND REPLACED SOLELY AT THE EXPENSE OF THE CONTRACTOR.
- SIDEWALKS AND RAMPS: CONSTRUCTION OF SIDEWALKS, WHEELCHAIR RAMPS AND ACCESSIBLE ROUTES SHALL BE IN ACCORDANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICANS DISABILITY ACT (ADA).
- PAVEMENTS MARKINGS: PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE TEXAS 'UNIFORM TRAFFIC MANUAL FOR PAVEMENT MARKINGS' FIRE LANES SHALL BE STRIPED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES REQUIREMENTS. ALL HANDICAP SYMBOLS, SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH TAS AND ADA STANDARDS.

GENERAL NOTES-PAVEMENT JOINTING

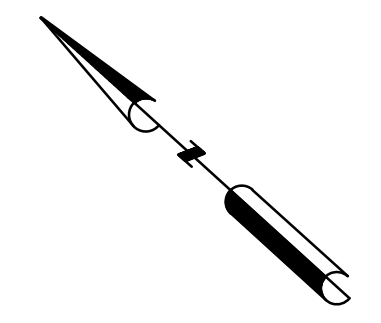
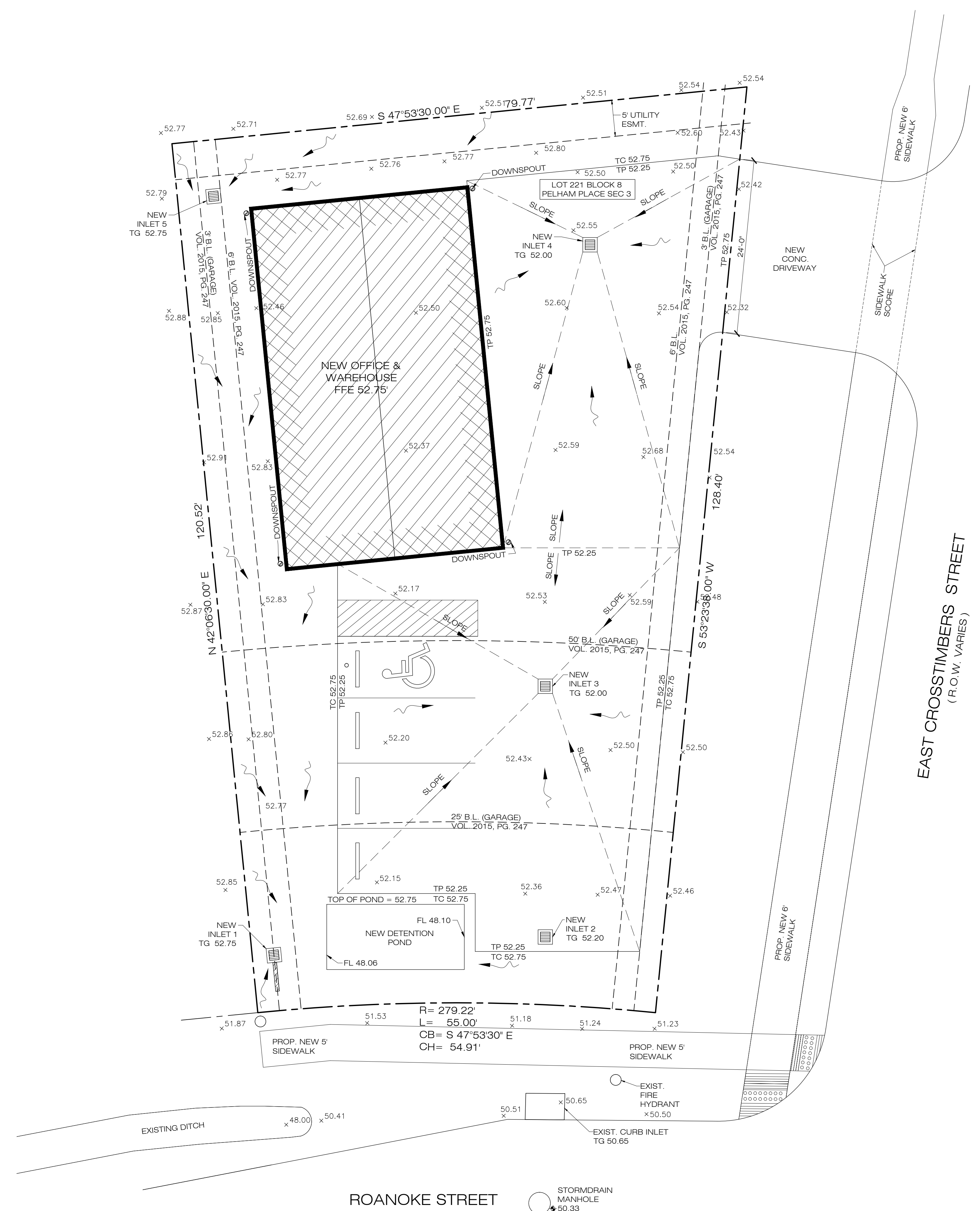
- PAVEMENT JOINT LAYOUT: IF A PROPOSED PAVEMENT JOINT LAYOUT PLAN HAS BEEN PROVIDED BY THE ENGINEER, THE CONTRACTOR SHALL IMPLEMENT THAT PLAN OR PROVIDE AN ALTERNATE JOINT LAYOUT TO THE ENGINEER FOR REVIEW. IF A PAVEMENT JOINT LAYOUT PLAN HAS NOT BEEN PROVIDED, THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARATION OF THE PLAN AND SUBMITTAL TO THE ENGINEER FOR REVIEW. THE CONTRACTORS JOINT LAYOUT PLAN SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW A MINIMUM OF 2 WEEKS PRIOR TO BEGINNING PAVING CONSTRUCTION.
- SAW CUTTING: SAW CUTTING SHALL BE DONE WITHIN EIGHT HOURS OF POUR OR AS SOON AS CONCRETE CAN SUPPORT WEIGHT. THE CONTRACTOR SHALL MARK JOINT LOCATIONS AT THE CENTERLINE OF THE DOWEL LENGTH DURING HIS PAVING OPERATIONS. ALL SAWED JOINTS ARE TO BE TRUE IN ALIGNMENT AND SHALL CONTINUE THROUGH THE CURB RADIAL JOINTS SHALL BE NO SHORTER THAN EIGHTEEN INCHES.
- JOINT SEALING: ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, DIRT, DUST, SCALE, CURING COMPOUND AND CONCRETE, BLOWN DRY AND IMMEDIATELY SEALED.
- ODD SHAPED PANELS: ODD SHAPED PANELS SHALL BE REINFORCED WITH #4 BARS AT 18" EACH WAY. AN ODD SHAPED PANEL IS CONSIDERED TO BE ONE IN WHICH THE SLAB TAPERS TO A SHARP ANGLE WHEN THE LENGTH TO WIDTH RATIO EXCEEDS 3 TO 1 OR WHEN A SLAB IS NEITHER SQUARE NOR RECTANGULAR.
- EXPANSION JOINTS: THE CONTRACTOR SHALL PROVIDE AN EXPANSION JOINT AROUND THE PERIMETER OF ANY BLOCKOUT IN THE CONCRETE PAVING.

- LEGENDS:**
- TBM TEMPORARY BENCHMARK
 - FG FINISHED GRADE
 - FL FLOW LINE
 - GT GUTTER LINE
 - TOP CURB
 - TG TOP GRATE
 - TP TOP PAVEMENT
 - TS TOP SLAB
 - GROUND ELEVATION
 - TYPE 'A' INLET
 - JUNCTION BOX
 - STORM SEWER
 - FLOW DIRECTION
 - PAVEMENT EDGE
 - CLEAN OUT (CO)

2 LEGEND
SCALE: N.T.S.

4 GENERAL NOTES
SCALE: N.T.S.

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



CONSULTANT

OWNER

NEW OFFICE/WAREHOUSE
6817 ROANOKE ST.
HOUSTON TX. 77028

ISSUE LOG

DATE	DESCRIPTION
PRE	
PMT	
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PROJECT NO:

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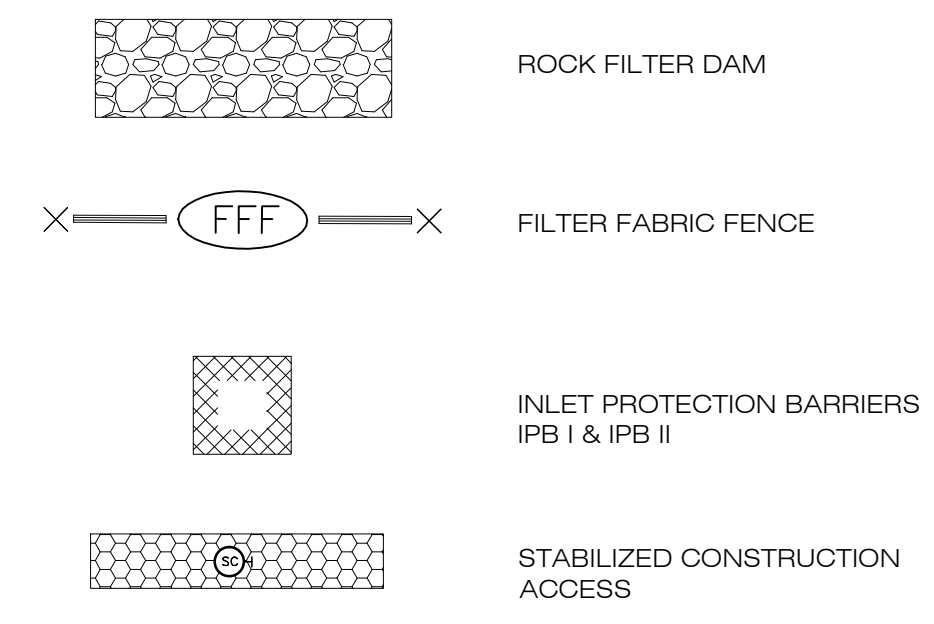
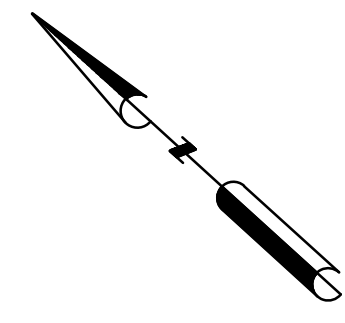
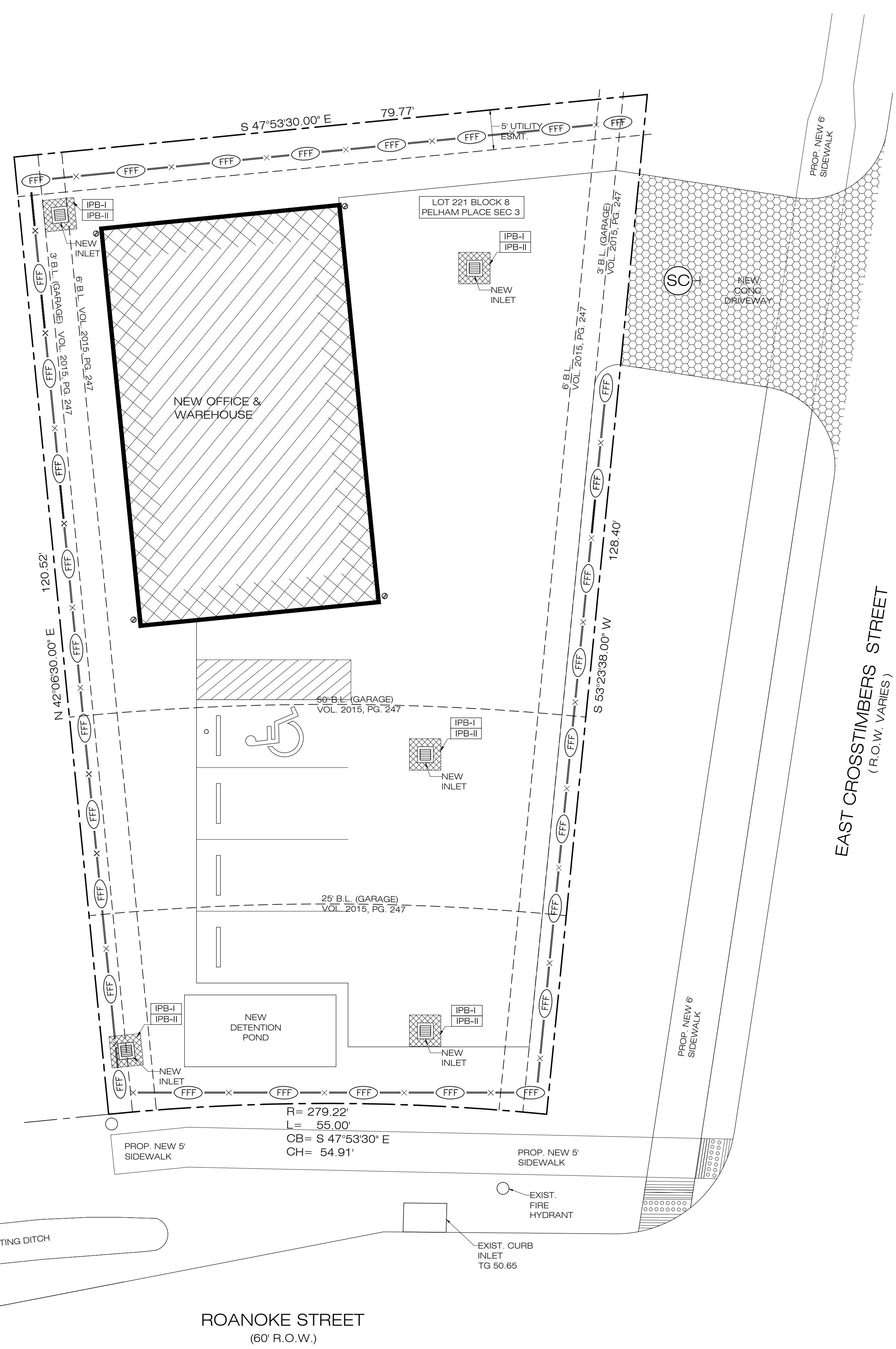
DATE OF ISSUE:

SHEET No.

SWPPP

1/8" = 1'-0"
SHEET No.

C5.0



2 LEGEND
SCALE: N.T.S.

I CERTIFY UNDER A PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ENSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, TO THE OF MY KNOWLEDGE AND BELIEF, THE INFORMATION SUBMITTED IS TRUE, ACCURATE, BEST AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SWPPP CONSTRUCTION NOTES:

- CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPPP) PLANS TO KEEP SILT AND / OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
- DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATED MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEEPED BACK INTO THE EXCAVATED AREA.
- CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FROM THE EXCAVATED AREA.
- CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIALS AS CONSTRUCTION PROGRESSES.
- CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
 - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
 - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - STRUCTURAL CONTROL MEASURES.
 - LOCATIONS WHERE VEHICLES ENTER OR EXIST THE SITE.
- CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND / OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACK FILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING, SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

3 NOTES
SCALE: N.T.S.

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

ROANOKE STREET
(60' R.O.W.)

R= 279.22'
L= 55.00'
CB= S 47°53'30" E
CH= 54.91'

CONSULTANT

OWNER

NEW OFFICE/WAREHOUSE
6817 ROANOKE ST.
HOUSTON TX. 77028

ISSUE LOG

DATE	DESCRIPTION

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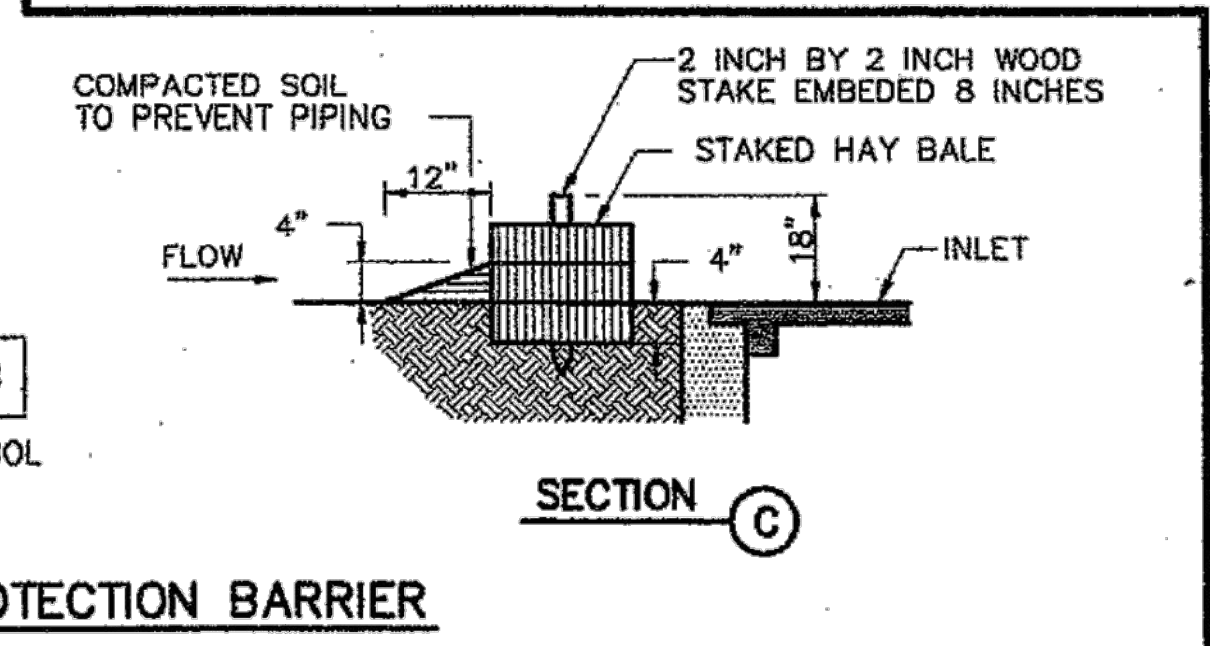
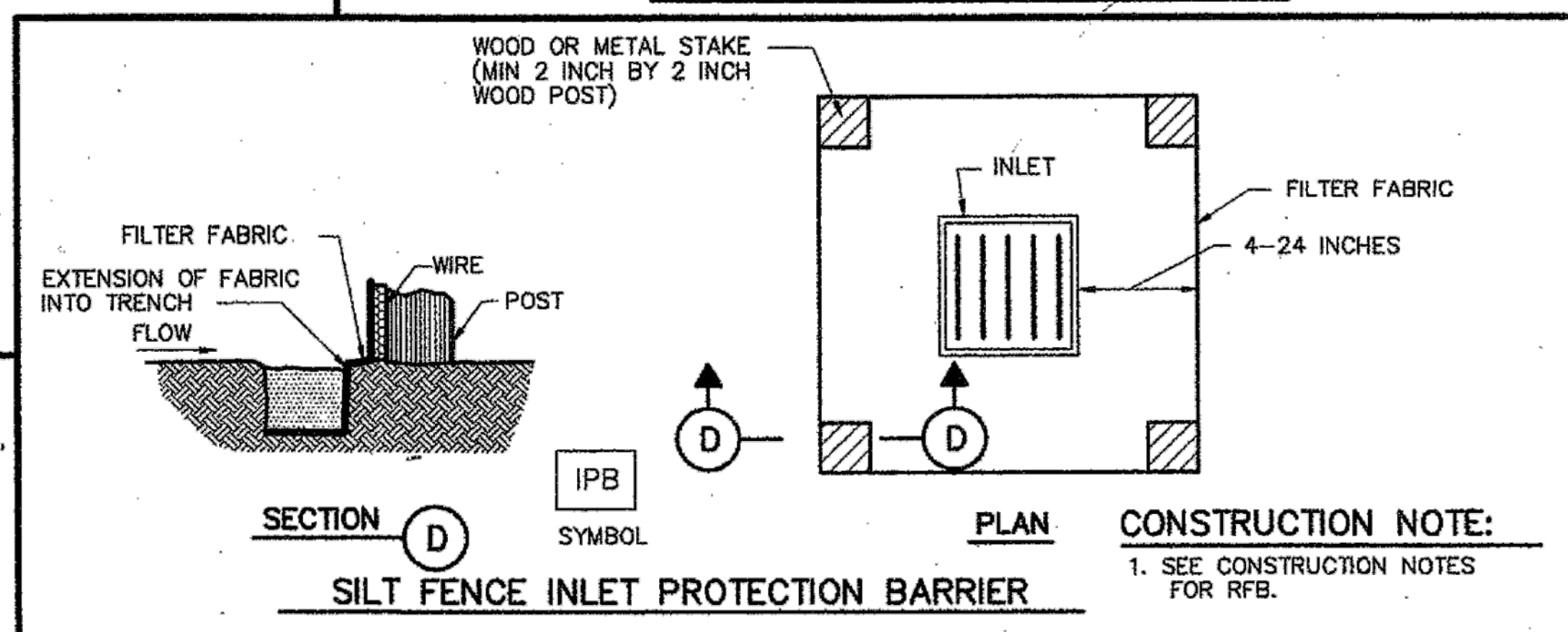
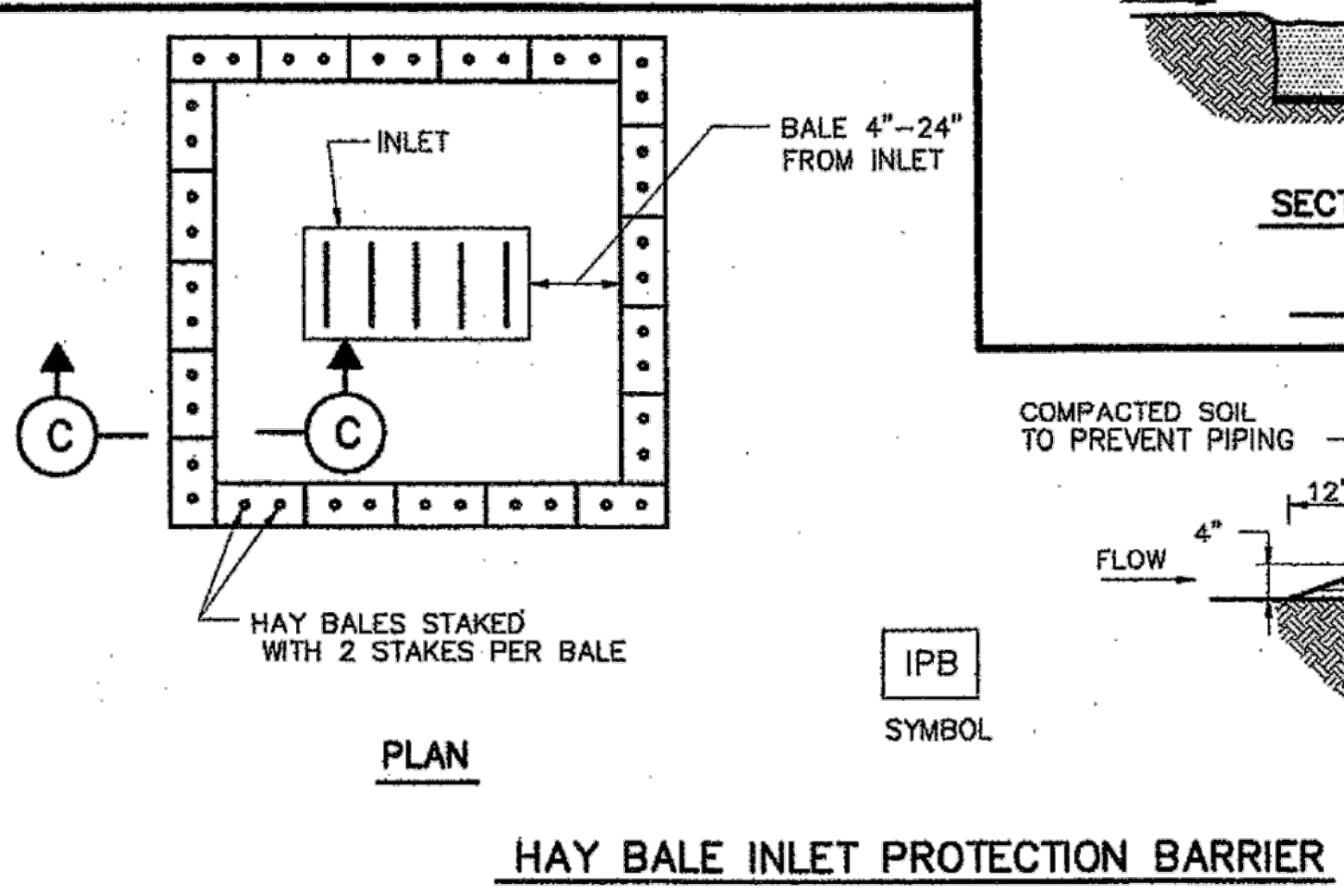
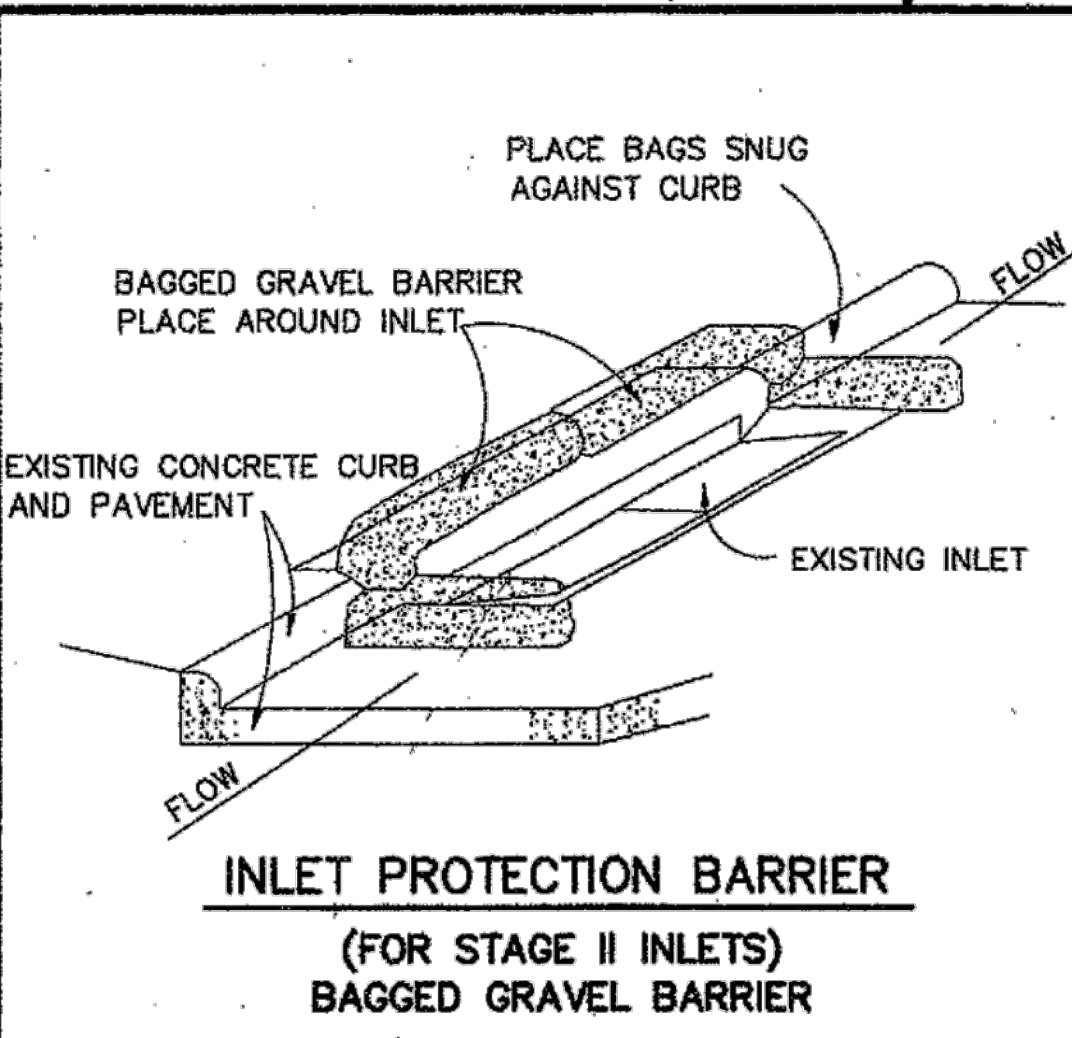
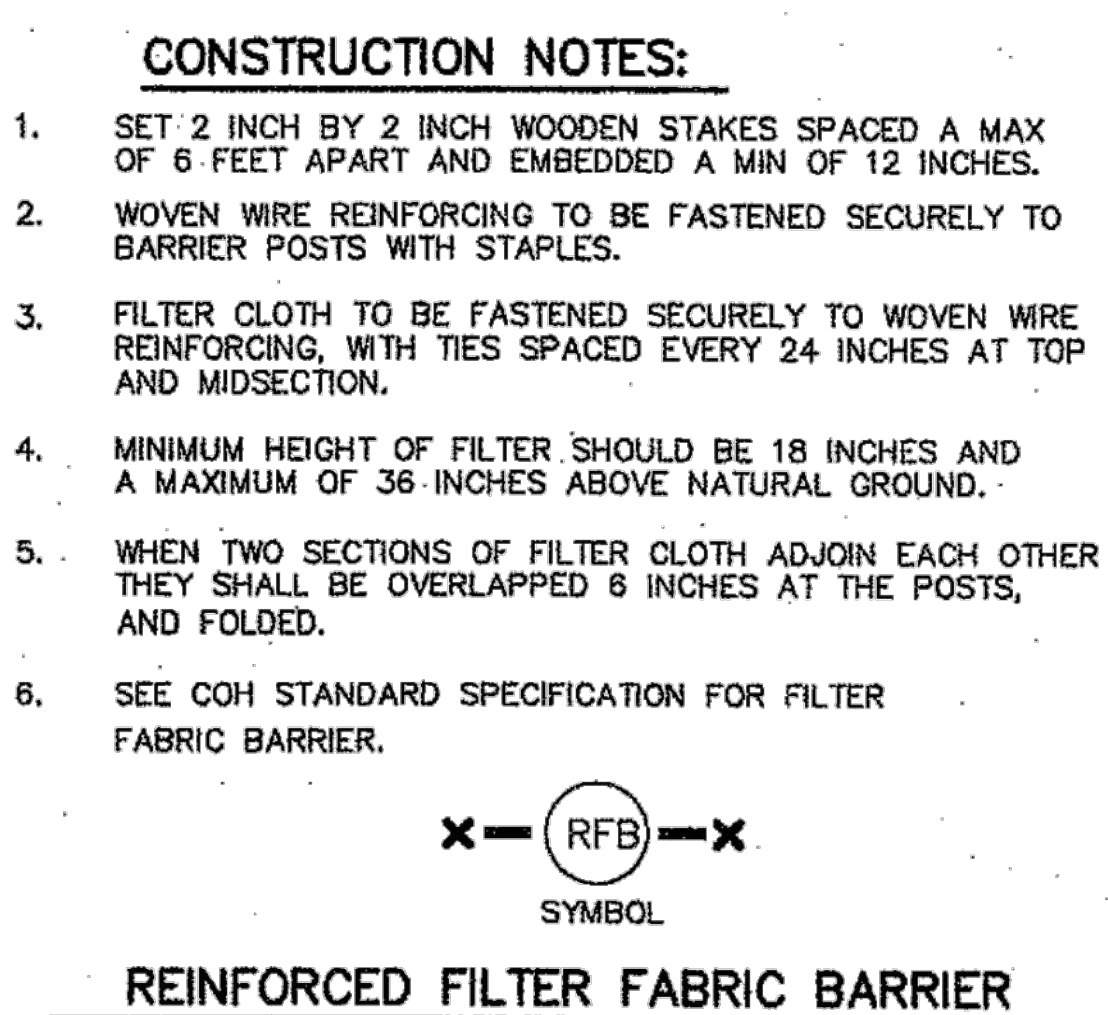
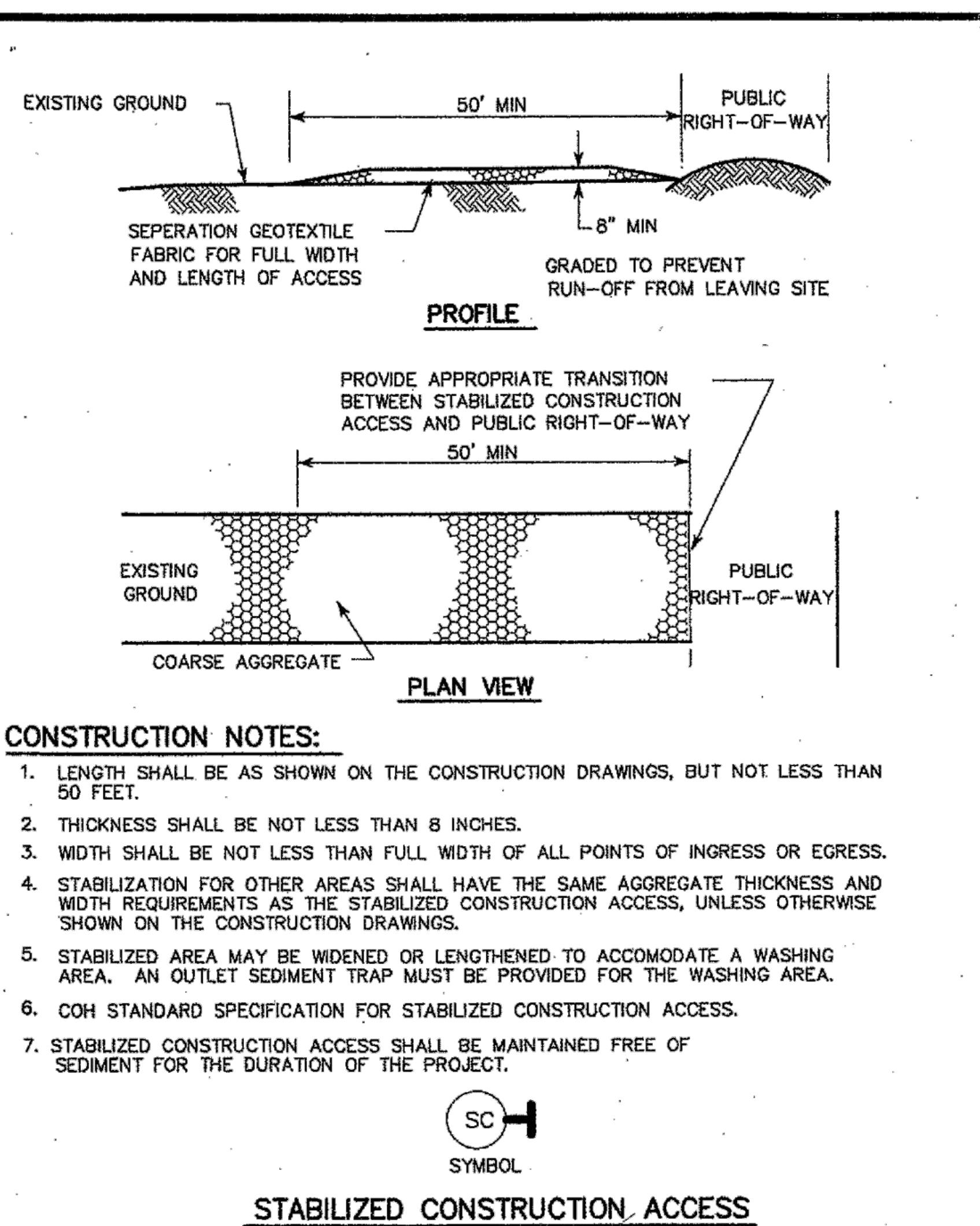
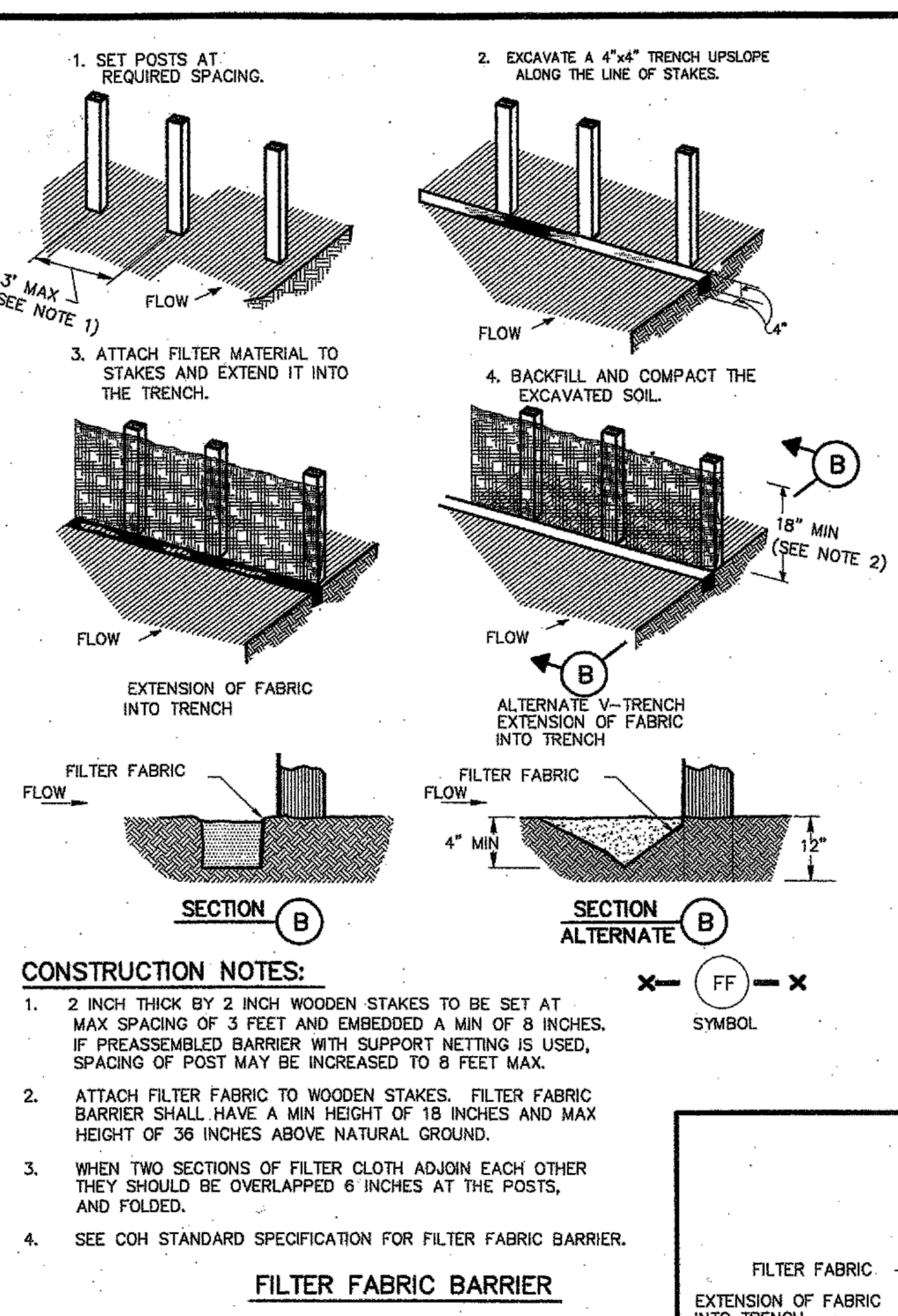
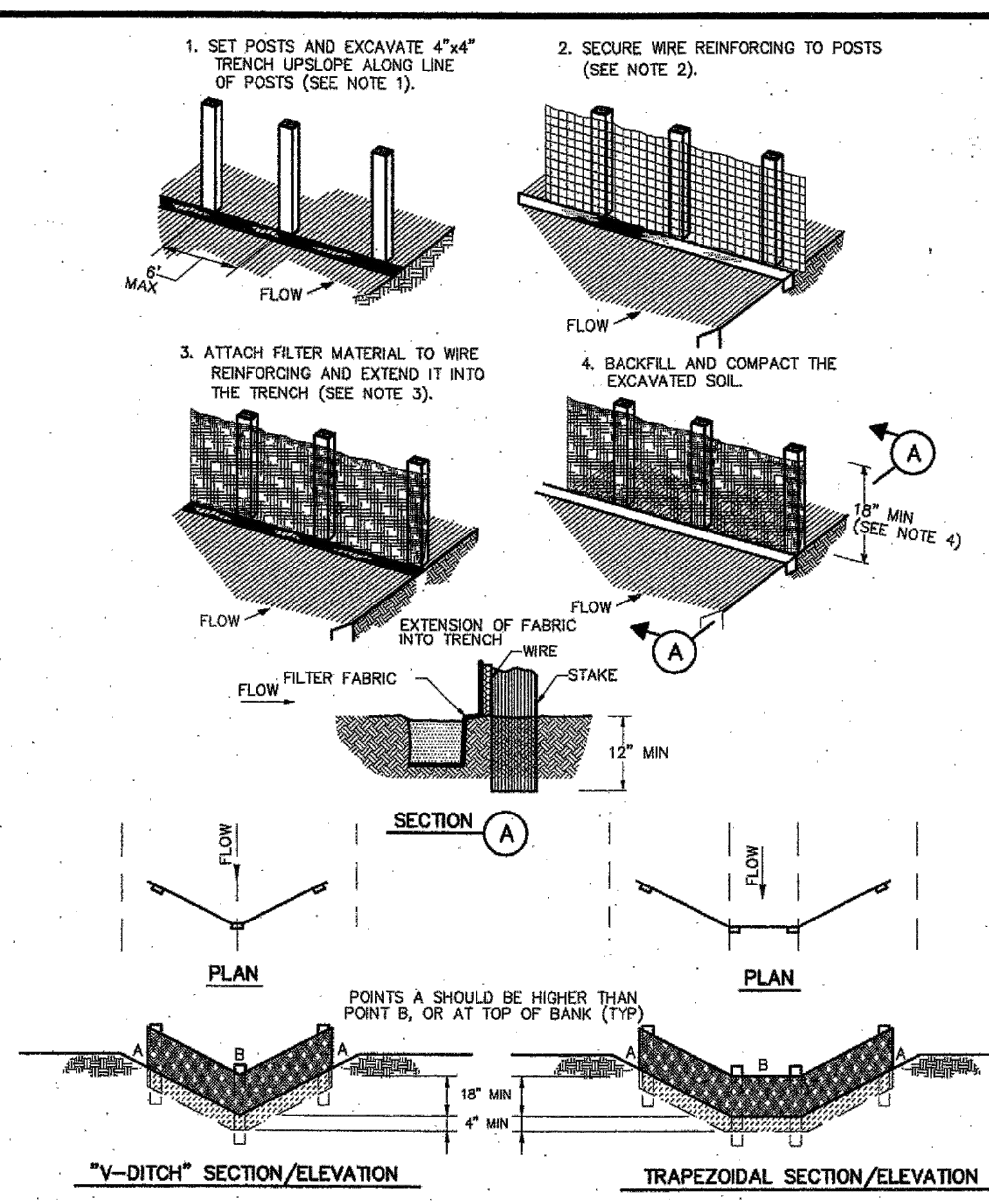
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DETAILS

SHEET No.

C5.2



CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

STORM WATER POLLUTION PREVENTION PLAN DETAILS
(NOT TO SCALE)

APPROVED: [Signature] CITY ENGINEER
APPROVED: [Signature] DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JULY-01-2010 DWG NO: 01571-01

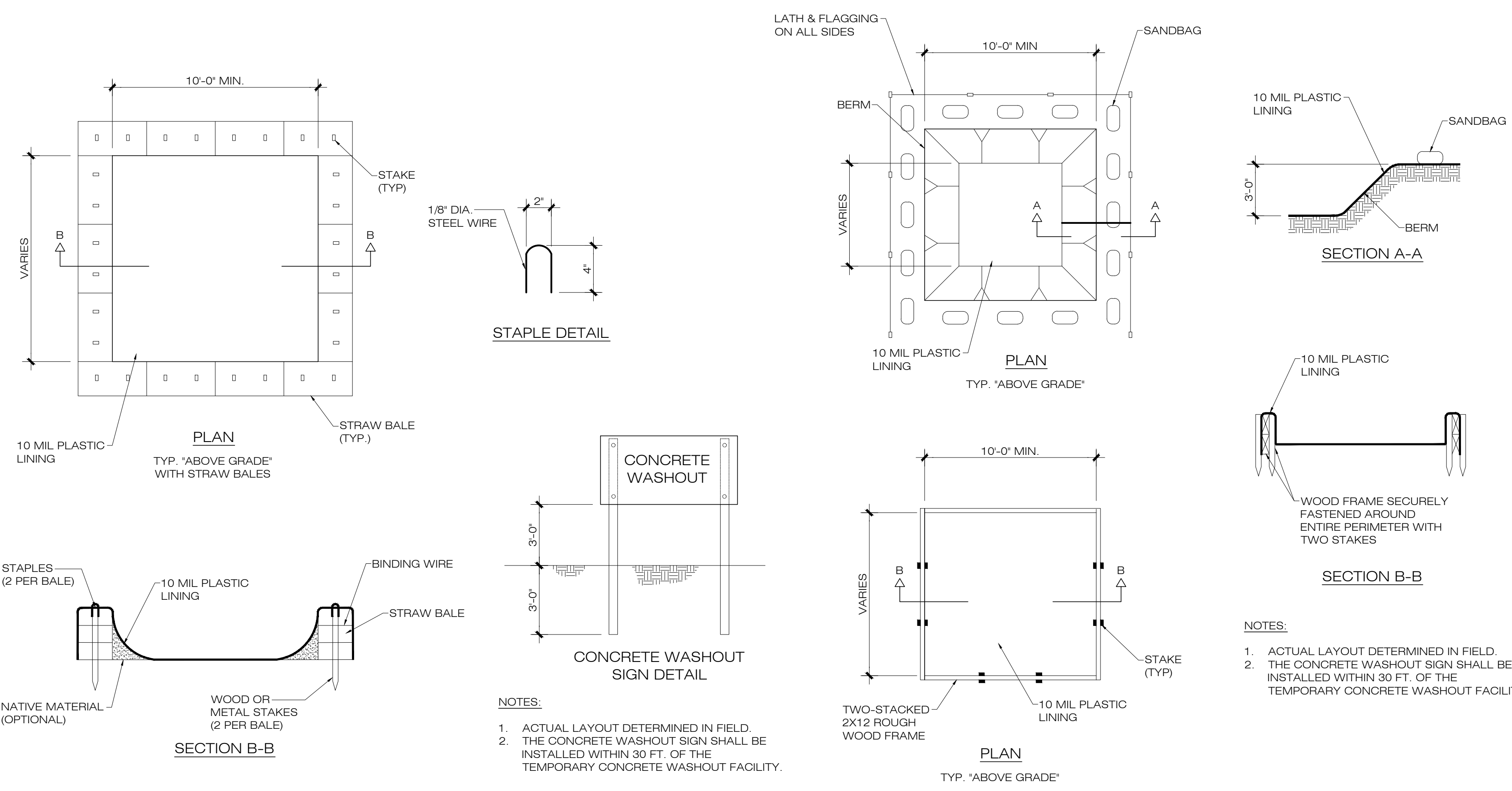
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DETAILS

SHEET No.

C5.3



NOTES:

- TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 50 FT. FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT DISTURBANCE OR TRACKING.
- A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.
- TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED ABOVE GRADE OR BELOW GRADE AT THE OPTION OF THE CONTRACTOR. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- TEMPORARY WASHOUT FACILITIES SHOULD HAVE A TEMPORARY PIT OR BERMED AREAS OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS GENERATED DURING WASHOUT PROCEDURES.
- WASHOUT OF CONCRETE TRUCKS SHOULD BE PERFORMED IN DESIGNATED AREAS ONLY.
- ONLY CONCRETE FROM MIXER TRUCK CHUTES SHOULD BE WASHED INTO CONCRETE WASH OUT.
- CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFFSITE.
- ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF OFFSITE IN A LEGAL MANNER. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.
- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE):
 - TEMPORARY WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN IN THE DETAILS ON THIS SHEET, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
 - STRAW BALES, WOOD STAKES, AND SANDBAG MATERIALS SHOULD CONFORM TO THE PROVISIONS IN THE EROSION AND SEDIMENT CONTROL PLAN.
 - PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE BELOW GRADE):
 - TEMPORARY WASHOUT FACILITY (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED AS SHOWN IN THE DETAILS ON THIS SHEET, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
 - LATH AND FLAGGING SHOULD BE COMMERCIAL TYPE.
 - PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

NOTES:

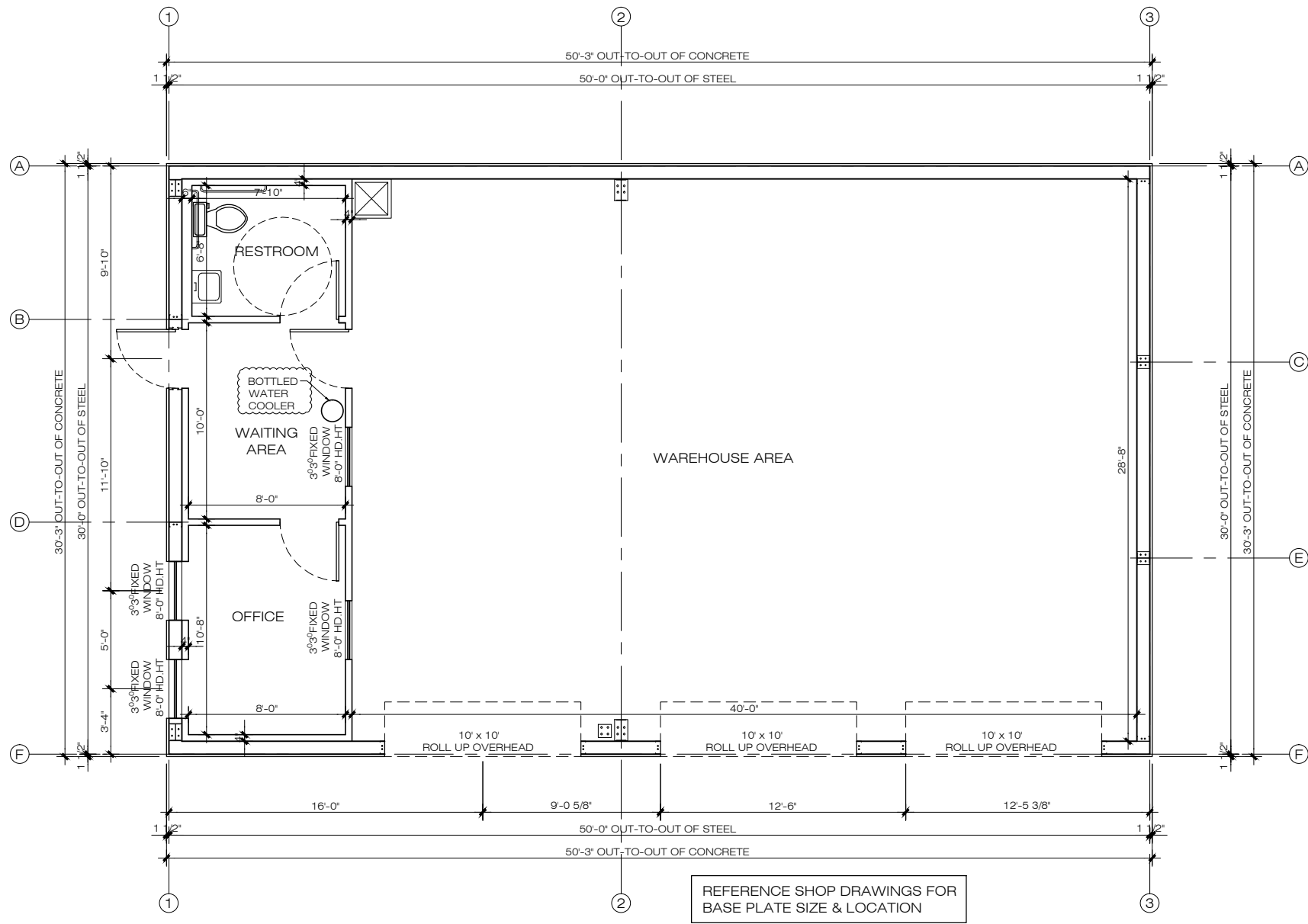
- ACTUAL LAYOUT DETERMINED IN FIELD.
- THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES

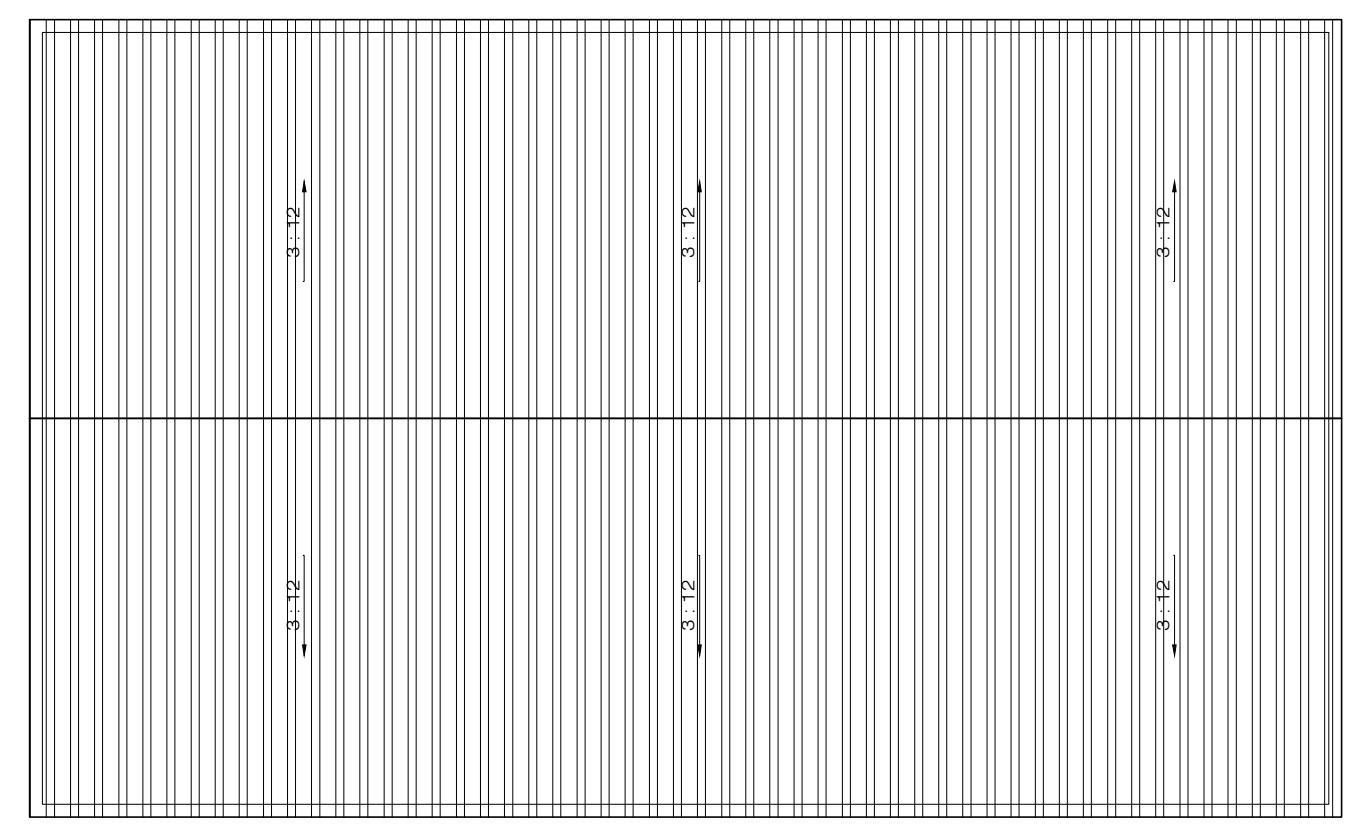
- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

INSPECTION AND MAINTENANCE

- INSPECT AND VERIFY THAT ACTIVITY-BASED BMPs ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES. WHEN ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDER WAY, INSPECT WEEKLY DURING THE RAINY SEASON AND AT TWO WEEK INTERVALS IN THE NON-RAINY SEASON TO VERIFY CONTINUED BMP IMPLEMENTATION.
- TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 4 IN. FOR ABOVE GRADE FACILITIES AND 12 IN. FOR BELOW GRADE FACILITIES. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION. HARDENED CONCRETE MATERIALS SHOULD BE REMOVED AND DISPOSED OF.
- WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.



1 DIMENSION FLOOR PLAN
SCALE: 1/4"=1'-0"



2 ROOF PLAN
SCALE: 1/4"=1'-0"

NOTE - PRE-ENGINEERED METAL BUILDING SYSTEM, COMPLETE WALL, COLUMNS/BEAMS, ROOF & WALL PANELS ETC FROM SINGLE MANUFACTURER. METAL BUILDING MANUFACTURER SHALL DESIGN STRUCTURE SO AS TO SUPPORT ALL DOCUMENTED CITY AND OWNER REQUIREMENTS. THE METAL BUILDING MANUFACTURER IS RESPONSIBLE FOR THE DESIGN OF THE COMPLETE SUPERSTRUCTURE FRAMING, SHALL SUPPLY ALL BRACING CONNECTION FOR LATERAL LOADS AND ALL WALLS ARE TIED TO THE METAL BUILDING FRAMING SYSTEM. SHALL SUPPLY ALL CONNECTION DETAILS. ALL FINISH COLORS TO BE SELECTED BY OWNER FROM FULL RANGE.

- ALL WOOD BLOCKING, FRAMING, AND / OR FIRE STOPPING USED WITHIN PARTITIONS, ETC. SHALL BE OF FIRE RETARDANT TREATED LUMBER AS REQUIRED BY CODE. PROVIDE FIRE RETARDANT WOOD BLOCKING AT ALL ROUGH OPENINGS IN GYPSUM BOARD PARTITIONS AS REQUIRED BY CODE. LOCATIONS INCLUDE BUT ARE NOT LIMITED TO: CEILING AND WALL-MOUNTED FIXTURES, GRAB BARS, HANDRAILS, TOILETS, TOILET ACCESSORIES, CABINETS, PANELING COUNTERTOPS, SHELVES, CLOSET RODS, WHITE BOARDS, AND DECORATIVE ITEMS.
- PIPE, DUCTS ETC. ALL SUCH LINES SHALL BE CONCEALED OR FURRED, UNLESS NOTED AS EXPOSED CONSTRUCTION.
- PROVIDE WATER RESISTIVE GYPSUM BOARD AT TOILET ROOM AREAS. REFER TO SHEET A3.0 FOR ROOM FINISHED SCHEDULE.
- CONTRACTOR SHALL PROVIDE NEW FIRE EXTINGUISHER CABINETS AND FIRE EXTINGUISHERS IN ACCORDANCE WITH THE NFPA AS PART OF THIS PROJECT.
- CONTRACTOR SHALL PROVIDE ALL INTERIOR, FRAMES AND HARDWARE. CONTRACTOR SHALL REFER TO THE ARCHITECT'S DOOR SCHEDULES.
- COORDINATE AND VERIFY EXACT LOCATION OF ALL PLUMBING, ELECTRICAL AND MECHANICAL EQUIPMENT WITH ARCHITECTURAL AND MEP SERIES DRAWINGS.
- PROVIDE CONT ACOUSTICAL SEALANT ON BOTH SIDES AT ADJACENT WALLS AND AT TOP AND BOTTOM OF GYPSUM BOARD ASSEMBLY WALLS TO FLOOR/ROOF DECK AND FLOOR.
- PROVIDE SOUND ATTENUATION INSULATION AT ALL RESTROOMS WALL(S) ADJACENT TO ADMINISTRATION, TYP.
- PROVIDE VISIBLE, DURABLE SIGN ON OR ADJACENT TO MAIN EXIT DOOR STATING, "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED".

3 GENERAL NOTES
SCALE: N.T.S.

- ALL OPENINGS AND PENETRATIONS IN THE BUILDING ENVELOPE SHALL BE SEALED WITH CAULKING MATERIALS OR CLOSED WITH CASCKETING SYSTEMS COMPATIBLE WITH THE CONSTRUCTION MATERIALS AND LOCATION. JOINTS AND SEAMS SHALL BE SEALED IN THE SAME MANNER OR TAPED OR COVERED WITH A MOISTURE VAPOR-PERMEABLE WRAPPING MATERIAL. SEALING MATERIALS SPANNING JOINTS BETWEEN CONSTRUCTION MATERIALS SHALL ALLOW FOR EXPANSION AND CONTRACTION OF THE CONSTRUCTION MATERIALS.
- GENERAL CONTRACTOR SHALL FINISH GRADE AS PER SITE DRAINAGE PLAN TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING WITH SELECT FILL OR ADDED TOPSOIL, AS REQUIRED.
- ALL NEW CONSTRUCTION, WINDOWS, DOORS, ROOF AND ROOF STRUCTURE SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.
- VERIFY MOUNTING HEIGHTS OF ALL ELECTRICAL AND MECHANICAL DEVICES ON EXTERIOR OF BUILDING PRIOR TO CONSTRUCTION.
- CAST STONE SHALL BE MANUFACTURED & INSTALLED PER THE RECOMMENDATIONS OF THE CAST STONE INSTITUTE MANUAL.
- STOP RECESSED & PROJECTED BRICK COURSES 4" (HORIZ). FROM 90° INTERSECTIONS W/ STOREFRONT, MTL. ROOFS, AND DOORS FRAMES, TYP.
- PROVIDE SOLID BRICKS @ ALL EXTERIOR CORNERS ON SOLDIER COURSES.
- G.C. COORDINATE ALL CONTROL JOINTS. VERIFY ALL JOINTS TO ALIGN W/ WINDOWS VERTICALLY & HORIZONTAL, TYP.
- ALL STUCCO AND MASONRY CONTROL JOINTS SHALL BE INSTALLED PER INDUSTRY STANDARDS. (REF: MASONRY AND STUCCO HANDBOOKS).
- PROVIDE VERTICAL CONTROL JOINTS AT ALL DOOR AND WINDOW CONDITIONS IN ALL MASONRY WALLS AND AT ALL MASONRY WALL AREAS GREATER THAN 20 FEET VERT. OR HORIZ. MASONRY CONTROL JOINT TO BE SEALANT OVER BACKER ROD.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS PRIOR TO STARTING WORK.
- DIMENSIONS ARE TO TOP ACCENT BAND AND ARE SHOWN FOR REFERENCE ONLY.
- PROVIDE MASONRY JOINTS AT ALL OPENINGS LINTELS, COLUMN CENTER LINES, AND 2'-0" FROM EDGE OF INSIDE AND OUTSIDE CORNERS. COLUMN LINES NEAR OPENINGS DO NOT NEED A CONTROL JOINT. SPACE BETWEEN CONTROL JOINTS SHOULD NOT EXCEED 30'.

4 GENERAL NOTES
SCALE: N.T.S.



CONSULTANT

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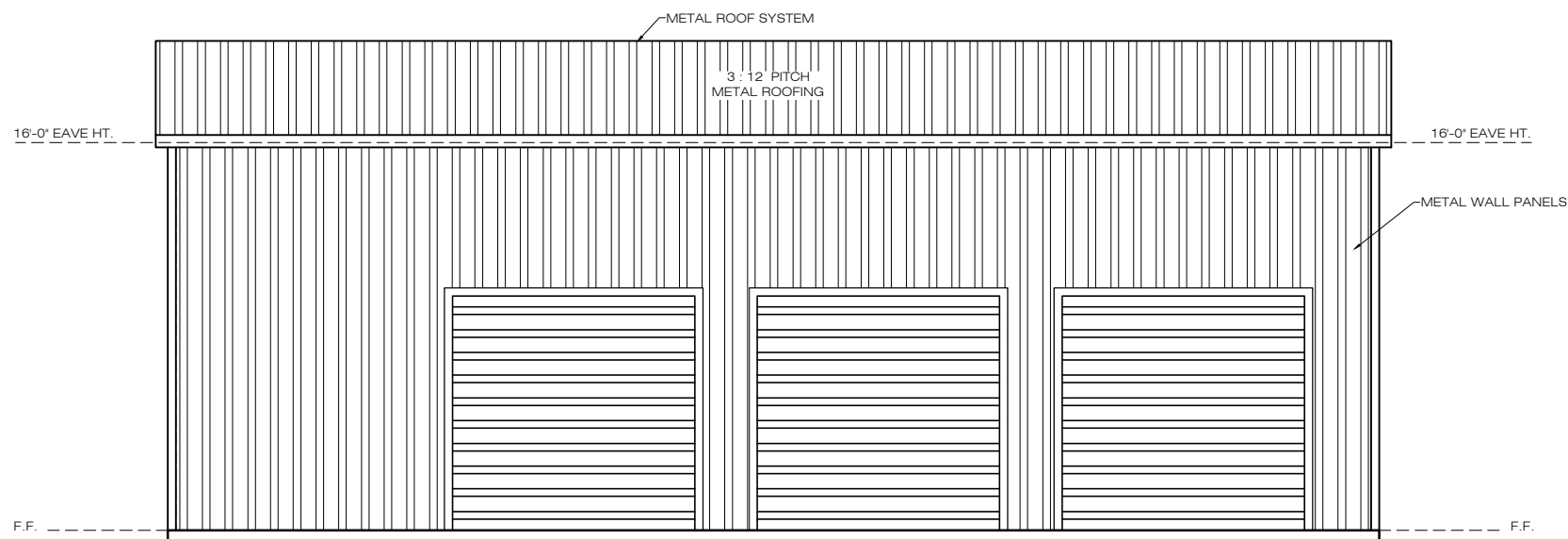
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DIMENSION/ROOF PLAN

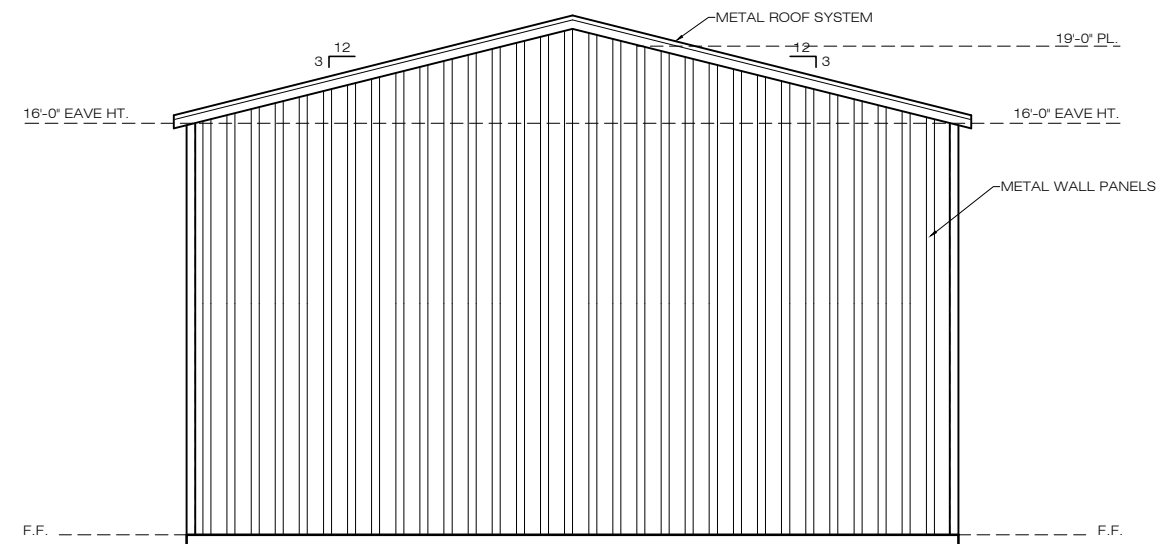
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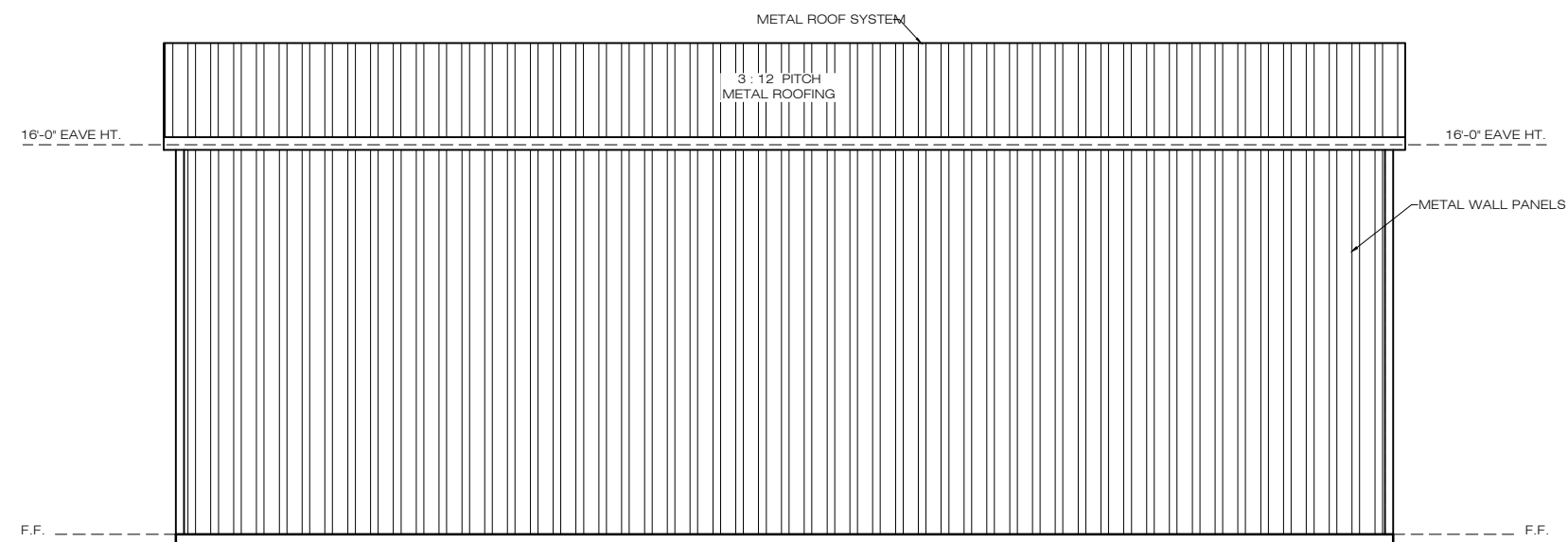
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HOUSTON, TX 77017
(281) 888-1711
talamantes.design@yahoo.com



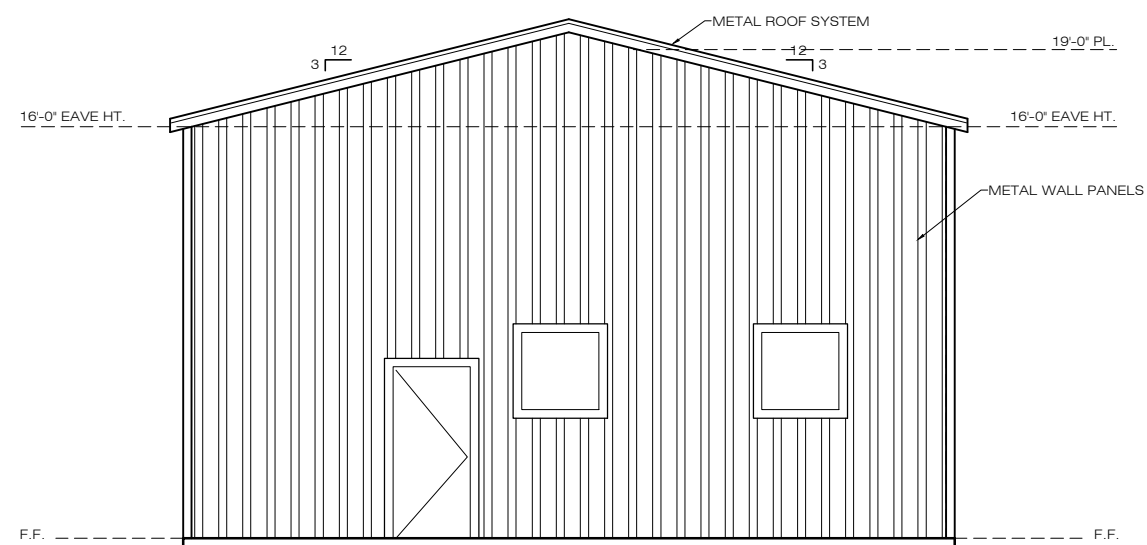
1 FRONT ELEVATION
SCALE: 1/4"=1'-0"



2 RIGHT ELEVATION
SCALE: 1/4"=1'-0"



3 REAR ELEVATION
SCALE: 1/4"=1'-0"



4 LEFT ELEVATION
SCALE: 1/4"=1'-0"

1. ALL WOOD BLOCKING, FRAMING, AND / OR FIRE STOPPING USED WITHIN PARTITIONS, ETC. SHALL BE OF FIRE RETARDANT TREATED LUMBER AS REQUIRED BY CODE. PROVIDE FIRE RETARDANT WOOD BLOCKING AT ALL ROUGH OPENINGS IN GYPSUM BOARD PARTITIONS AS REQUIRED BY CODE. LOCATIONS INCLUDE BUT ARE NOT LIMITED TO: CEILING AND WALL-MOUNTED FIXTURES, GRAB BARS, HANDRAILS, TOILETS, TOILET ACCESSORIES, CABINETS, PANELING COUNTERTOPS, SHELVES, CLOSET RODS, WHITE BOARDS, AND DECORATIVE ITEMS.
2. PIPE, DUCTS ETC. ALL SUCH LINES SHALL BE CONCEALED OR FURRED, UNLESS NOTED AS EXPOSED CONSTRUCTION.
3. PROVIDE WATER RESISTIVE GYPSUM BOARD AT TOILET ROOM AREAS.
4. REFER TO SHEET A3.0 FOR ROOM FINISHED SCHEDULE.
5. CONTRACTOR SHALL PROVIDE NEW FIRE EXTINGUISHER CABINETS AND FIRE EXTINGUISHERS IN ACCORDANCE WITH THE NFPA AS PART OF THIS PROJECT.
6. CONTRACTOR SHALL PROVIDE ALL INTERIOR, FRAMES AND HARDWARE. CONTRACTOR SHALL REFER TO THE ARCHITECTS DOOR SCHEDULES.
7. COORDINATE AND VERIFY EXACT LOCATION OF ALL PLUMBING, ELECTRICAL AND MECHANICAL EQUIPMENT WITH ARCHITECTURAL AND MEP SERIES DRAWINGS.
8. PROVIDE CONT ACOUSTICAL SEALANT ON BOTH SIDES AT ADJACENT WALLS AND AT TOP AND BOTTOM OF GYPSUM BOARD ASSEMBLY WALLS TO FLOOR/ ROOF DECK AND FLOOR.
9. PROVIDE SOUND ATTENUATION INSULATION AT ALL RESTROOMS WALL(S) ADJACENT TO ADMINISTRATION, TYP.
10. PROVIDE VISIBLE, DURABLE SIGN ON OR ADJACENT TO MAIN EXIT DOOR STATING, 'THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED'.

5 GENERAL NOTES
SCALE: N.T.S.

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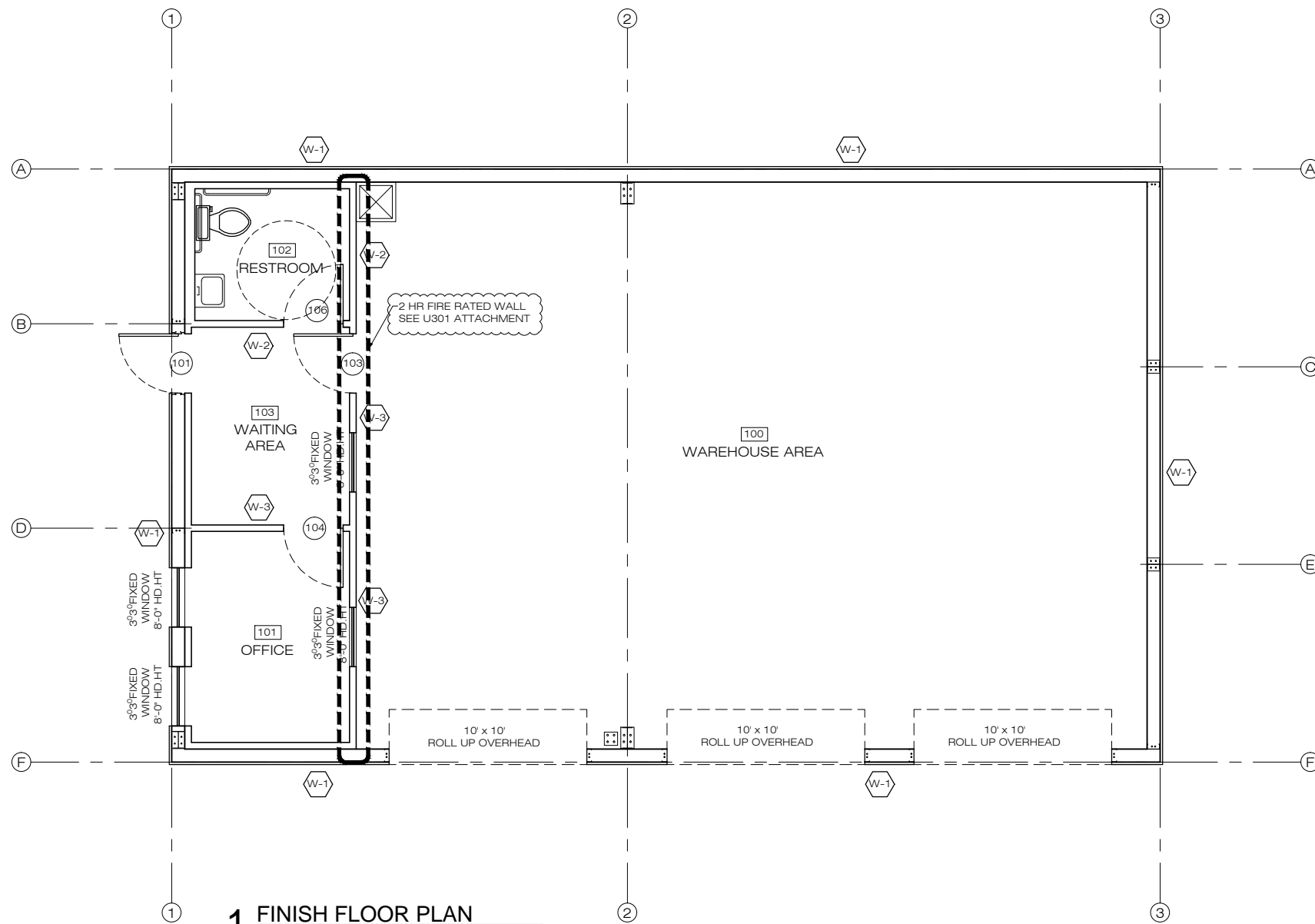
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1 FINISH FLOOR PLAN
SCALE: 1/4"=1'-0"

- CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING BID, TO VERIFY AND DETERMINE THE ADEQUATE FLOOR SLAB PREPARATION REQUIRED TO MAINTAIN A FINISHED FLOOR LEVEL. VARIATION NOT EXCEEDING 1/8" PER 10'-0" IN EACH DIRECTION.
- INSTALL FLOOR MOUNTED DOOR STOPS BEHIND ALL DOORS WHERE SCHEDULED OR OTHERWISE NECESSARY TO PROTECT WALL.
- ALL WALLS TO BE PAINTED (U.N.O.).
- ALL EXISTING HOLLOW METAL DOOR FRAMES TO RECEIVE PAINT.
- PAINT SAMPLES MUST BE SUBMITTED PRIOR TO PAINTING. PROVIDE MINIMUM 3 x 3" SAMPLES ON MATERIAL SAME AS SUBSTRATE SCHEDULED TO BE PAINTED.
- WALLS & CEILING OF FOOD PREPARATION AREAS, FOOD STORAGE AREAS, EQUIPMENT & UTENSIL WASHING AREAS, TOILET ROOMS & VESTIBULES SHALL BE LIGHT COLORED, SMOOTH, NON- ABSORBENT & EASILY CLEANABLE.
- ALL INTERIOR FINISHES SHALL BE IN COMPLIANCE WITH LOCAL AND NATIONAL CODES. THE CONTRACTOR SHALL ADVISE THE OWNER IMMEDIATELY UPON DISCOVERY OF A NON-COMPLIANT FINISH. ALL FINISHES SHALL BE INSTALLED PER MANUFACTURERS INSTALLATION INSTRUCTION.
- ALL SURFACES SHALL BE PREPARED APPROPRIATELY TO RECEIVE THE SPECIFIED FINISH.
- PROTECT NEW INSTALLED FINISHES FOR DAMAGE THAT MAY OCCUR FROM OTHER TRADES.
- EXAMINE ALL FINISH SURFACES AFTER COMPLETION OF WORK AND PROCEED WITH TOUCH-UP AS REQUIRED.
- ALL FINISHES SHALL BE LEFT IN A 'LIKE NEW CONDITION'.
- CONTRACTOR IS RESPONSIBLE FOR FINAL CLEANING OF ALL FINISHES IN ALL AREAS.

2 GENERAL NOTES
SCALE: N.T.S.

ROUGH BLOCKING

- INTERIOR PANEL PRODUCTS SHALL BE FIRE RETARDANT IN COMPLIANCE WITH AWPA C27, INTERIOR TYP B.
- PROVIDE BLOCKING, NAILERS, GROUNDS, FURRING AND OTHER SIMILAR ITEMS REQUIRED TO RECEIVE AND SUPPORT MILLWORK AND OTHER WORK.

DRYWALL

- LIMIT DEFLECTION OF PARTITIONS TO FOLLOWING LIMITS:
 - BASED ON 5 PSF UNIFORM DESIGN LOAD
 - PARTITIONS TO RECEIVE TILE: L/240.
 - OTHER PARTITIONS: L/120.
- IF PARTITION HEIGHT EXCEEDS STUD MANUFACTURERS LIMITING HEIGHT FOR APPLICABLE LOADING AND DEFLECTION INSTALL BRACING, ABOVE THE CEILING, DECREASE STUD SPACING, OR INCREASE STUD GAGE.
- SOUND BATT INSULATION WHERE SCHEDULED SHALL COMPLY WITH ASTM C 665, TYPE 1, GLASS FIBER COMPOSITION, UNFACED, NON-COMBUSTIBLE WHEN TESTED IN ACCORDANCE WITH ASTM E136.
- INSTALL PARTITION AND CEILING FRAMING IN ACCORDANCE WITH ASTM C754 AND MANUFACTURERS INSTRUCTIONS.
- INSTALL GYPSUM PANELS IN ACCORDANCE WITH ASTM 754, GA-216 AND MANUFACTURERS INSTRUCTIONS.
 - EXTEND ACOUSTICAL PARTITION PASS INTERSECTING NON-ACOUSTICAL PARTITIONS.
 - FILL WALL CAVITY WITH SOUND BATTS. ELIMINATE ALL VOIDS.
 - SEAL ACOUSTICAL PARTITION AT PERIMETER AND AROUND PENETRATIONS WITH CONTINUOUS BEAD OF SEALER IN FIRE RATED PARTITIONS. USE FIRE STOPPING SEALER IN ACOUSTICAL PARTITIONS. USE ACOUSTICAL SEALER SEAL SPACE BETWEEN GYP. BD. PANEL AT CONTROL JOINTS, PRIOR TO INSTALLING METAL CONTROL JOINTS. APPLY SEALER TO PENETRATIONS THROUGH PARTITIONS.
- INSTALL ACCESSORIES AS FOLLOWS:
 - INSTALL IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
 - INSTALL CORNER REINFORCEMENT AT OUTSIDE CORNERS. USE SINGLE LENGTHS WHERE LENGTH OF CORNER DOES NOT EXCEED STANDARD HEIGHT.
 - INSTALL SASSING WHERE INDICATED AND WHERE GYP. BD. ABUTS DISSIMILAR MATERIALS OR STOPS EDGE EXPOSED.
 - INSTALL CONTROL JOINTS AT WALLS AND PARTITIONS AT MAXIMUM OF 30'.
 - INSTALL CONTROL JOINT IN GYP. BD. CEILING AT A MAXIMUM OF 50'.
- TREAT JOINT AND FASTENERS IN GYP. BD. IN ACCORDANCE WITH GA-214.
- LEVEL OF FINISH
 - SURFACES IN PLENUM (LEVEL 1)
 - WATER RESISTANT GYP. BD. (LEVEL 2)
 - SURFACE TO RECEIVE FLAT AND EGG-SHELL PAINTS (LEVEL 4).
 - SURFACE TO RECEIVE SEMI-GLOSS PAINT (LEVEL 5).
- NEW PARTITIONS CONSTRUCTED TO DECK SHALL RECEIVE RETURN AIR BOOTS APPROPRIATELY SIZED FOR PROPER OPERATION OF HVAC SYSTEM.
- FOR PARTITIONS UNDER 10'-0" HIGH OR LESS, USE VERTICAL INSTALLATION FOR PARTITIONS OVER 10'-0" HIGH USE HORIZONTAL INSTALLATION AND STAGGER PANELS.
- NEW FIRE RATED PARTITIONS SHALL HAVE FIRE DAMPERS OF THE APPROPRIATE SIZE AND RATING.
- PROVIDE ACCESS PANEL OF THE APPROPRIATE FIRE RATING FOR MECHANICAL, ELECTRICAL OR PLUMBING ACCESS.

3 CONSTRUCTION NOTES
SCALE: N.T.S.

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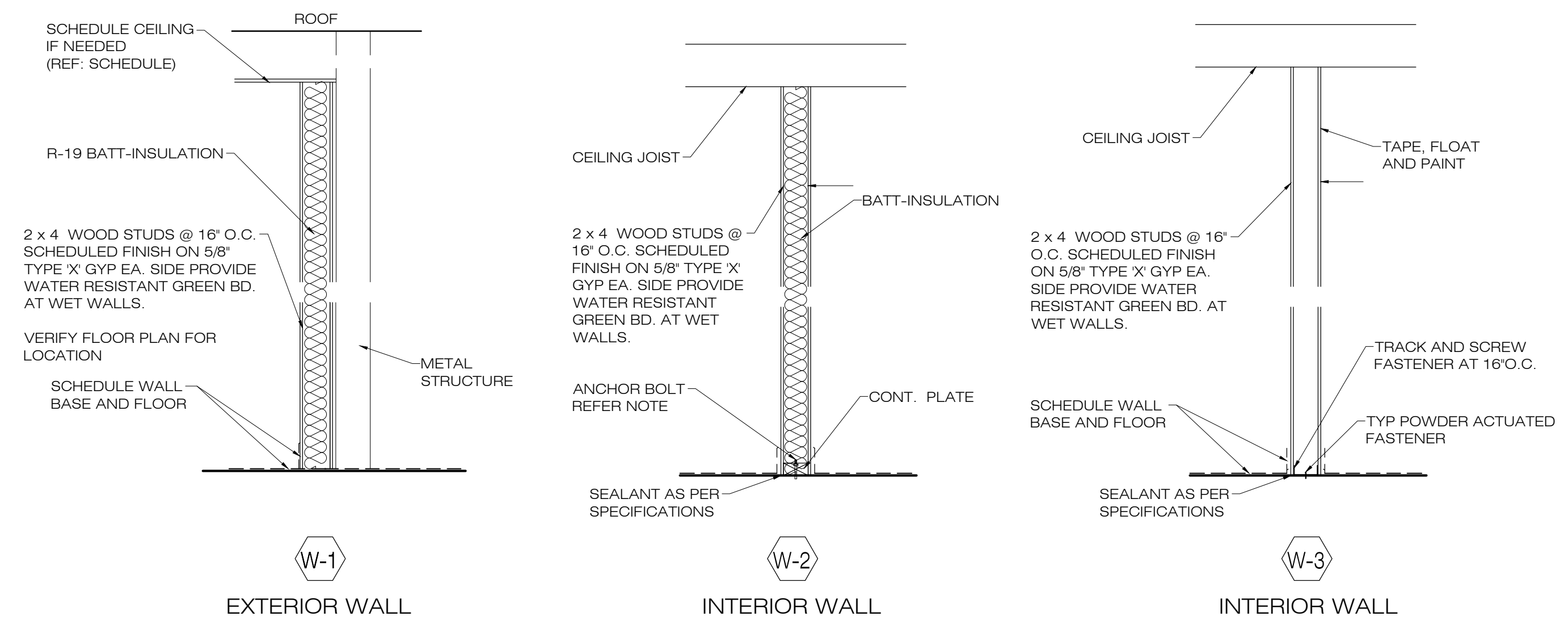
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FINISH SCHEDULE

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1 SECTIONS
SCALE: N.T.S.

ROOM FINISH SCHEDULE

TAKE NORTH = UP ON PLANS

NUMBER	NAME	FLOOR FINISH	CEILING FINISH	CEILING HEIGHT	WALL FINISH				BASE				COMMENTS
					N	E	S	W	N	E	S	W	
100	WAREHOUSE AREA	F9	C8	OPEN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
101	OFFICE	F3	C1	9'-0"	W5	W5	W5	W5	B7	B7	B7	B7	
102	RESTROOM	F3	C1	9'-0"	W5	W5	W5	W5	B7	B7	B7	B7	WHITE FRP @ 48" A.F.F
103	WAITING AREA	F3	C1	9'-0"	W5	W5	W5	W5	B7	B7	B7	B7	

GENERAL FINISH NOTES

- FLOOR MATERIAL CHANGES BETWEEN ROOMS TO OCCUR UNDER DOOR (U.N.O.) REFER TO FURNISHING & EQUIPMENT PLANS FOR FLOOR MATERIAL TRANSITIONS AND PATTERS.
- (#) REFERENCES THE FINISH SCHEDULE REMARKS.
- COORDINATE INTERIOR FINISHES WITH WALL TYPES (SEE PLAN).
- ALL ACT SHALL BE PER THE FOLLOWING GUIDELINES:
*ACT SHALL BE 24" x 48" LAY-IN ACOUSTICAL PANEL CEILING (U.N.O.).
- REFER TO LIGHTING PLANS FOR CEILING GRID LAYOUT(U.N.O.).
- PROVIDE CJS AT GYP BD CEILINGS AT 50'-0" OC MAX (U.N.O.).
PROVIDE CJS AT WALLS/BLKHDS AT 30'-0" OC MAX (U.N.O.).

- ALL INTERIOR WALLS TO BE TYPE W-1 & W-2 UNLESS INDICATED OTHERWISE REFER TO FLOOR PLANS FOR OTHER PARTITION TYPE INDICATIONS.
- REFER TO SCHEDULES & DETAILS FOR FINISHES. PARTITION TYPES REFER TO BASE WALL ONLY.
- ALL GYPSUM WALLBOARD SHALL BE 5/8" TYPE "X", UNLESS NOTED OTHERWISE.
- ALL GYPSUM WALLBOARD SHALL BE MOISTURE RESISTANT AT THE FOLLOWING LOCATIONS: (ROOM SIDE OF WALL, U.N.O.)
A. TOILET ROOMS, WET WALLS AND ALL WALLS ADJACENT TO WET WALLS.
- PROVIDE WATER RESISTANT GYPSUM BOARD AT LOCATIONS TO RECEIVE TILE. AT ROOMS NOT SCHEDULED TO BE AIR CONDITIONED, AND ELSEWHERE AS NOTED.
- SOUND ATTENUATION BLANKETS SHALL EXTEND FULL HEIGHT OF PARTITIONS.
- REVIEW PLANS AND PROVIDE BRACING IN PARTITIONS AS REQUIRED FOR CASEWORK, EQUIP, ETC. IF WOOD BLOCKING IS REQD. PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING.
- ALL DOOR JAMBS SHALL BE DOUBLE STUDDED. FULL HEIGHT FRAME SHALL BE BRACED TO STRUCTURE.
- PROVIDE BRACING AND BLOCKING AS REQUIRED IN WALLS RECEIVING MILLWORK, SHELVING AND ANY OTHER WALL-HUNG FURNITURE OR EQUIPMENT.
- PARTITIONS TO EXTEND MINIMUM 8" ABOVE CEILING, UNLESS NOTED OTHERWISE.

3 PARTITION NOTES
SCALE: N.T.S.

NON SPRINKLERED

EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES
B	B	C

- FLOORS**
- F1 NO FINISH (RAW CONCRETE)
 - F2 CARPET
 - F3 CERAMIC TILE
 - F4 STAINED, POLISHED AND SEALED CONCRETE
 - F5 CONCRETE WITH WATERPROOFING ADMIXTURE
 - F6 RUBBER FLOOR
 - F7 POLISHED CONCRETE
 - F8 WOOD OR PLYWOOD
 - F9 SEALED CONCRETE
 - F10 PORCELAIN TILE
 - F11 CONCRETE, EPOXY PAINTED
- CEILING**
- C1 LATEX PAINTED GYPBOARD
 - C2 TAPE AND FLOAT W.R. GYPBOARD
 - C3 2' X 2' ACOUSTICAL CEILING SYSTEM
 - C4 VINYL CLAD TILE 2' X 2' ACOUSTICAL CEILING SYSTEM
 - C5 PAINTED STRUCTURE
 - C6 2' X 4' ACOUSTICAL SYSTEM
 - C7 ENAMEL PAINTED W.R. GYPBOARD
 - C8 NO CEILING
 - C9 1-HR RATED GYPSUM BOARD, SMOOTH FINISH, EPOXY PAINTED
 - C10 2-HR RATED GYPSUM BOARD, SMOOTH FINISH, EPOXY PAINTED
 - C11 GLASS FIBER FACED GYPSUM BOARD, SMOOTH FINISH, EPOXY PAINTED
- WALLS**
- W1 CMU EPOXY PAINTED
 - W2 CMU UNPAINTED
 - W3 FACE STONE
 - W4 FACE STONE AT PERIMETER COLUMNS AND POURED IN PLACE CONCRETE ON INTERIOR COLUMNS
 - W5 LATEX-ENAMEL PAINTED GYPBOARD
 - W6 PLASTIC LAMINATE WAINSCOT AND TRIM PER ELEVATIONS
 - W7 CERAMIC TILE
 - W8 LATEX-ENAMEL PAINT ON W.R. GYPBOARD
 - W9 SMOOTH FINISH WHITE FRP
 - W10 TEMPERED MIRROR PER ELEVATIONS
 - W11 ENAMEL PAINTED CMU
 - W12 TAPE AND FLOAT W.R. GYPBOARD
 - W13 TAPE AND FLOAT GYPBOARD, PAINTED
 - W14 EPOXY PAINTED W.R. GYPBOARD
 - W15 ALUMINUM FRONT
 - W16 1-HR RATED GYPBOARD, SMOOTH FINISH PAINTED
 - W17 2-HR RATED GYPSUM BOARD
 - W18 WAINSCOT OF 6'X6' GLAZED CERAMIC TILE ON CEMENTATION BOARD UP TO 6'-0" A.F.F. GLASS FIBER FACED GYPSUM BOARD, EPOXY PAINTED ABOVE WAINSCOT
 - W19 STUCCO
- BASE**
- B1 6" RUBBER
 - B2 NONE AT CMU 6" RUBBER AT GYPSUM BOARD
 - B3 6" AT GYPSUM BOARD
 - B4 NONE
 - B5 6" X 6" GLAZED CERAMIC TILE WITH COVED BOTTOM EDGE
 - B6 4" RUBBER BASE
 - B7 CERAMIC TILE
 - B8 STAINED WOOD BASE WITH SHOE PER DETAIL
 - B9 FRP TO FLOOR WITH SEALANT JOINT
 - B10 RUBBER STRINGER

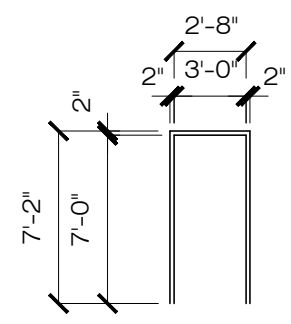
2 ROOM FINISH SCHEDULE
SCALE: N.T.S.

DOOR SCHEDULE

DOOR NO.	LOCATION	DOOR SIZE		FIRE RATING	DOOR TYPE	FRAME TYPE	HEAD	DOOR JAMB	DOOR SILL	THRESHOLD	HARDWARE	DESCRIPTION	COMMENTS
		WIDTH	HEIGHT										
101	WAREHOUSE AREA	3' - 0"	7' - 0"		C	METAL						HW-2	
102	WAREHOUSE AREA	3' - 0"	7' - 0"		C	METAL						HW-4	
103	OFFICE	3' - 0"	7' - 0"		A	WOOD						HW-7	
104	RESTROOM	3' - 0"	7' - 0"		A	WOOD						HW-3	

- HW - 1 (2) CONT GEARED HINGES
- (2) EXIT DEVICES, VERT ROD
- (2) CLOSERS, WITH OVERHEAD STOP
- (2) PULLS
- (1) SET WEATHERSTRIP
- (1) THRESHOLD
- (2) SWEEPS
- (2) DUSTPROOF FLOOR STRIKES
- HW - 2 (1.5) BUTT HINGES (PRS)
- (1) CLOSER W/ OHD STOP
- (1) LOCKSET
- (1) THRESHOLD
- (1) SET WEATHERSTRIP
- (1) SWEEP
- HW - 3 (1.5) BUTT HINGES (PRS)
- (1) LOCKSET - PRIVACY
- (1) SELF CLOSER
- HW - 4 (1.5) BUTT HINGES (PRS)
- (1) LOCKSET
- (1) CLOSER W/ CUSH. STOP
- (1) KICKPLATE
- HW - 5 (1.5) BUTT HINGES (PRS)
- (1) LOCKSET
- (1) CLOSER W/ OHD STOP
- (1) KICKPLATE
- HW - 6 (1.5) BUTT HINGES (PRS)
- (1) PUSH
- (1) PULL
- (1) CLOSER
- (1) SILENCERS
- (1) STOP
- HW - 7 (1.5) BUTT HINGES (PRS)
- (1) LOCKSET
- (1) SELF CLOSER

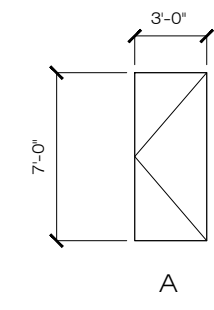
1 SCHEDULE
SCALE: N.T.S.



1 TYPICAL HOLLOW METAL FRAME

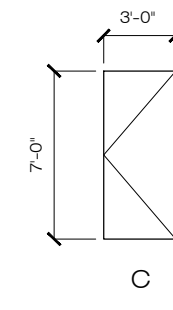
FRAME NOTES

- REFER TO PLANS FOR DOOR SWINGS AND HANDING.
- REFER TO PLANS FOR THROAT WIDTHS BASED ON PARTITION TYPE.
- ALL TRANSOM GLAZING TO BE FLOAT GLASS (UNTEMPERED) U.N.O.
- ALL SIDELITE GLAZING WITHIN A 24" ARC OF THE VERTICAL EDGE OF EITHER DOOR JAMB SHALL BE TEMPERED.
- ALL GLAZING IN RATED FRAMES SHALL BE PART OF A RATED SYSTEM EQUAL TO THE DOOR RATING.
- REFER TO PLANS FOR ALL SECURITY, COMMUNICATION, FIRE CONTROL AND POWER SYSTEMS TO BE COORDINATED WITH FRAMES.



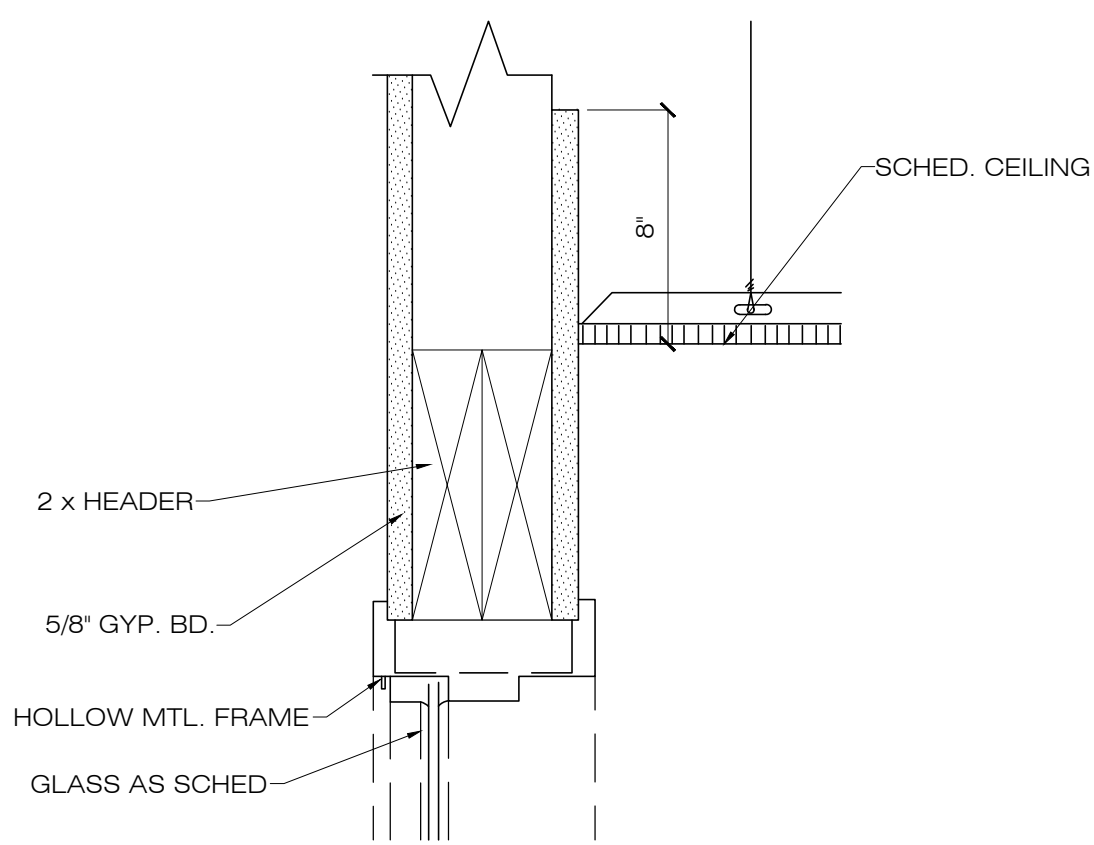
A SOLID CORE WOOD DOOR W/ FLUSH PANEL

B NO USE

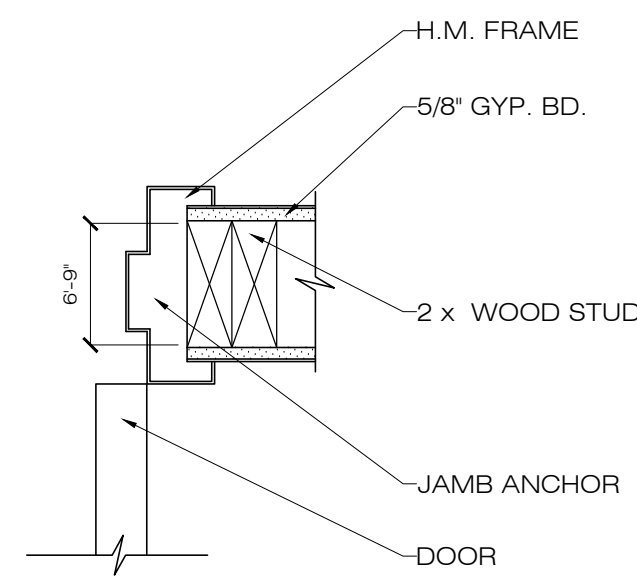


C 1 - HR FIRE RATED HOLLOW METAL DOOR PAINTED FINISH

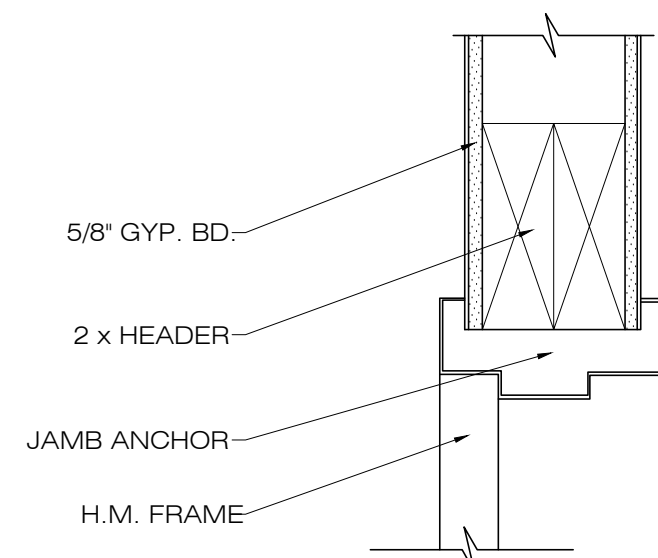
2 DOOR & WINDOW LEGEND
SCALE: N.T.S.



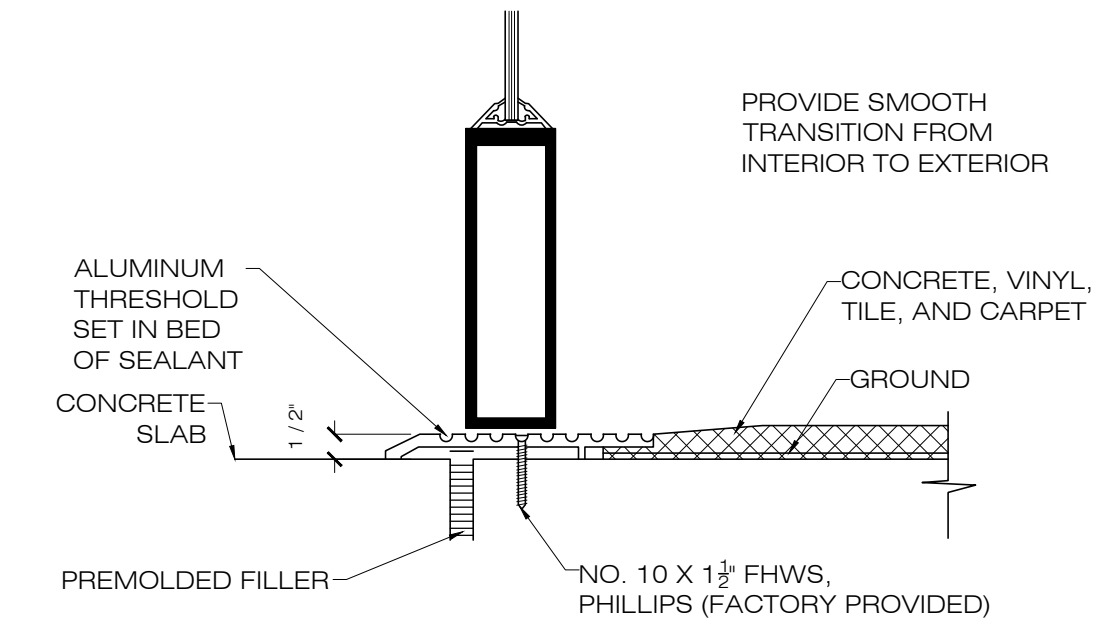
3 H.H. HEAD
SCALE: N.T.S.



4 INTERIOR DOOR JAMB
SCALE: N.T.S.



5 INTERIOR DOOR HEAD
SCALE: N.T.S.



6 ALUM THRESHOLD
SCALE: N.T.S.

- THRESHOLDS AT DOORWAYS SHALL NOT EXCEED 3/4" IN HEIGHT FOR EXTERIOR SLIDING DOORS OR 1/2" FOR OTHER TYPE OF DOORS. RAISED THRESHOLDS AND FLOOR LEVEL CHANGES SHALL BE BEVELED W/A SLOPE NO GREATER THAN 1:2.
- IF A DOOR HAS A CLOSER, THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70°, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
- ALL DOORS HARDWARE SHALL BE LEVER HANDLES OR EQUIVALENT. MOUNT NOT MORE THAN 48" A.F.F. MAXIMUM OPENING FORCE FOR EXTERIOR DOORS SHALL BE NO MORE THAN 8# AND 5# FOR INTERIOR DOOR.
- TACTILE SIGN WILL BE INCLUDED PER T.A.S.
- MOUNTING HEIGHTS FOR LEVER HANDLES, KNOBS, PUSH PLATES, PULL HANDLES, ALARM LOCKS, ETC., TO BE 42" TO CENTER LINE OF LATCH & 48" A.F.F. MAX. TO CENTER LINE OF PULL.

7 ACCESSIBILITY GENERAL NOTES
SCALE: N.T.S.

FRAME

- PROVIDE THE APPROPRIATE JAMB ANCHOR FOR LABELED OR NON LABELED FRAMES.
- PROVIDE A MINIMUM OF THREE ANCHORS PER JAMB OR SPACE AT 2'-0" MAX. O.C. WHICH EVER IS GREATER QUANTITY.
- VERTICAL OVERALL DIMENSIONS ARE FROM FINISH CONCRETE SLAB TO TOP OF FRAME (TYP.) - RE: DETAILS
- ALL INTERIOR DOOR FRAMES PAINTED.

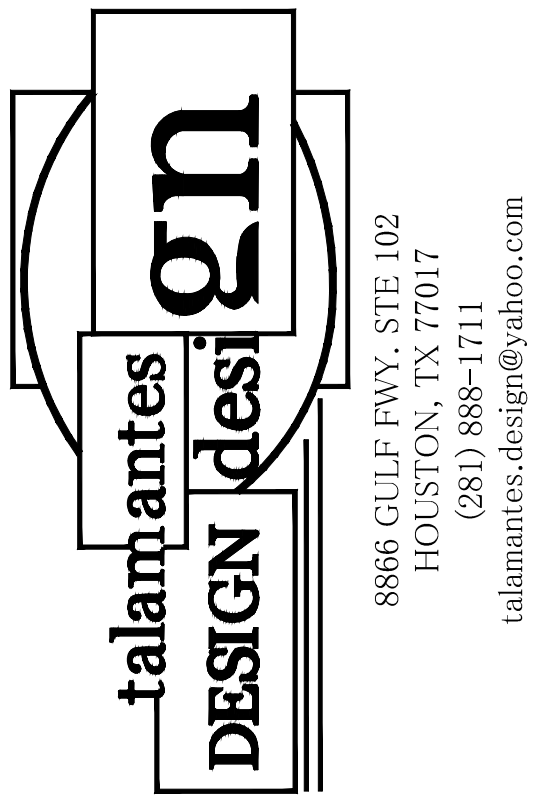
HARDWARE

- ALL DOORS & HARDWARE TO BE A.D.A. APPROVED. NEW & RELOCATED DOOR SHALL HAVE "LEVER-TYPE" HANDLES OR EQUIVALENT MOUNTED NOT MORE THAN 42" A.F.F. EXCEPT AT ACCESSIBLE STALLS WHICH SHALL BE MOUNTED 34"-36" A.F.F. MAX. OPENING FORCE FOR EXT. - DOOR = 8.5 POUNDS MAX. OPENING FORCE FOR INT. - DOOR = 5 POUNDS.

NOTES

- PROVIDE ALL HARDWARE REQUIRED TO MAKE DOORS FULLY OPERATIONAL. SEE ADDITIONAL HARDWARE.
- DOOR DIMENSIONS SHOWN ARE NOMINAL. ACTUAL DOOR DIMENSIONS SHALL BE ADJACENT AS REQUIRED FOR PROPER OPERATING CLEARANCES AT FRAMES, UNDERCUTS, ETC.
- ALUM. DOORS SHALL BE 1-1/2 HR RATED (B-LABEL).
- ALL DOOR HARDWARE TO BE "LEVER" TYPE TO MEET A.D.A. REQUIREMENTS.
- DOOR HARDWARE TO BE MOUNTED AT NOT MORE THAN 42" A.F.F.; EXCEPT AT "ACCESSIBLE" STALLS WHICH SHALL BE MOUNTED BETWEEN 34" AND 36" A.F.F.
- ALL H.H. FRAMES TO HAVE A 2" FACE DIMENSION WITH 5/8" STOP. PROVIDE 3/4" STOP FOR REQUIRED FOR FIRE RATED FRAMES.
- ALL EXTERIOR HM DOORS TO BE INSULATED AND GALVANIZED.
- EXTERIOR DOORS SHALL BE SELF CLOSING AND PROTECTED AGAINST ENTRANCE.
- FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATING FRAMES.
- THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE AS FOLLOWS:
 - FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY
 - OTHER DOORS:
 - EXTERIOR HINGED DOORS: (RESERVED)
 - INTERIOR HINGED DOORS: 5 lbf (22.2N)
- LOCKING HARDWARE TO USE STANDARD KEYWAYS AND CYLINDERS. LOCKING HARDWARE TO BE KEYPED IN THREE SETS: A) ALL COMBINATION LOCKSET OVERRIDE KEYS SHALL BE KEYPED ALIKE FOR SERVICE.
- W.O. = WALL OPENING; VERIFY WITH FLOOR.
- UNLESS NOTED OTHERWISE, INTERIOR DOORS ARE 1-3/4" HOLLOW CORE METAL DOORS, EXTERIOR DOORS ARE METAL.
- PROVIDE WOOD BLKG. IN GYP BD. WALLS BEHIND DOORS SCHEDULED TO HAVE WALL MOUNTED DOOR STOPS (REFER HARDWARE SCHEDULE SUBMITTAL).
- PROVIDE SIGNAGE AT ALL CODE REQUIRED 'EXIST DOORS. TEXT IS TO READ: THIS DOOR TO REMAIN UNLOCKED AT ALL TIMES WHILE THE BUILDING IS OCCUPIED'. LETTERING TO BE 1" HT. MINIMUM.
- REFER TO PLANS FOR DOOR SWINGS AND HANDING.
- REFER TO PLANS FOR THROAT WIDTHS BASED ON PARTITION TYPE.
- ALL GLAZING IN UNRATED DOORS TO BE TEMPERED GLASS (U.N.O.).
- ALL GLAZING IN RATED DOORS SHALL BE PART OF A RATED SYSTEM EQUAL TO THE DOOR RATING.
- ALL LIGHTS IN DOORS TO HAVE SAFETY GLAZING (U.N.O.).
- EXTERIOR DOORS TO HAVE TINTED GLAZING LAMINATE (U.N.O.) AND INTERIOR DOORS TO HAVE CLEAR GLAZING SAFETY (U.N.O.).
- UNDERCUT DOOR 1" GYP.
- DOOR THRESHOLDS ON EXTERIOR DOORS ONLY. KICK PLATES SHALL BE STAINLESS STEEL WITH US32D FINISHED. 10" HIGH AND 2" LESS THAN DOOR WIDTH. MANUFACTURED BY SCHLAGE OR APPROVED EQUAL. INSTALL ON PUSH SIDE ONLY.

8 GENERAL NOTES
SCALE: N.T.S.



CONSULTANT

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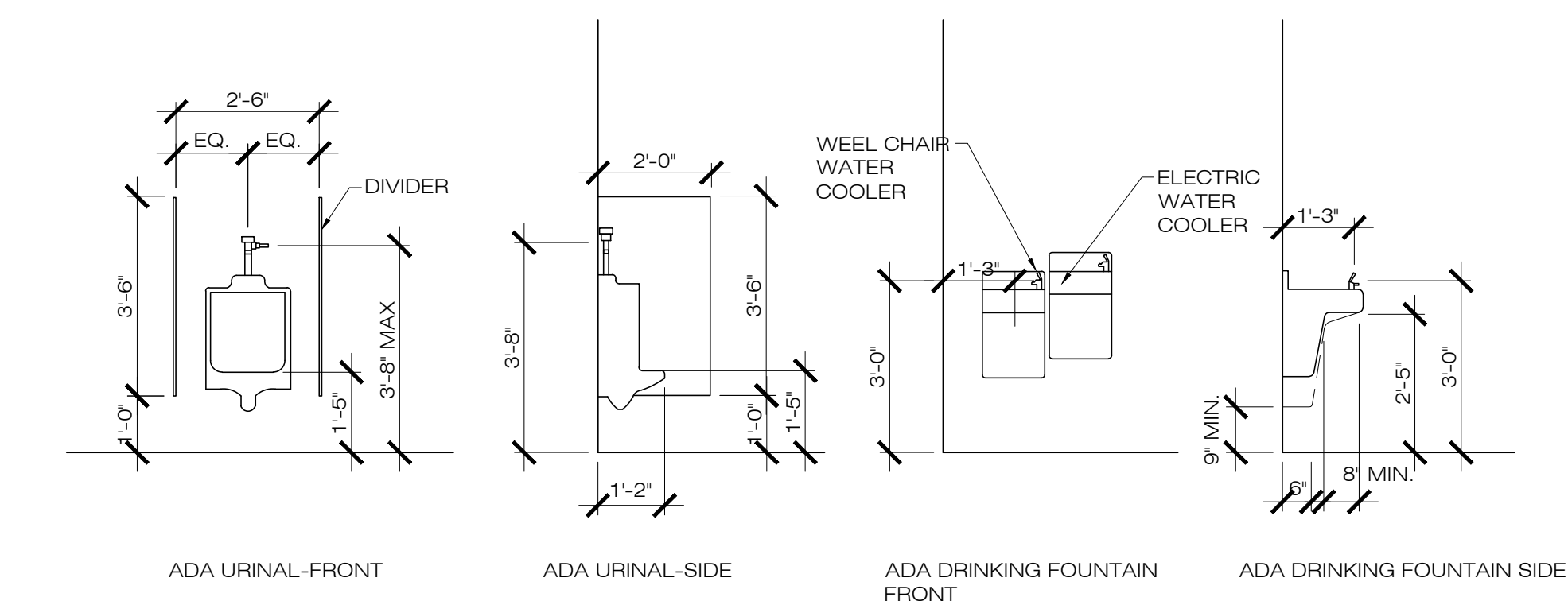
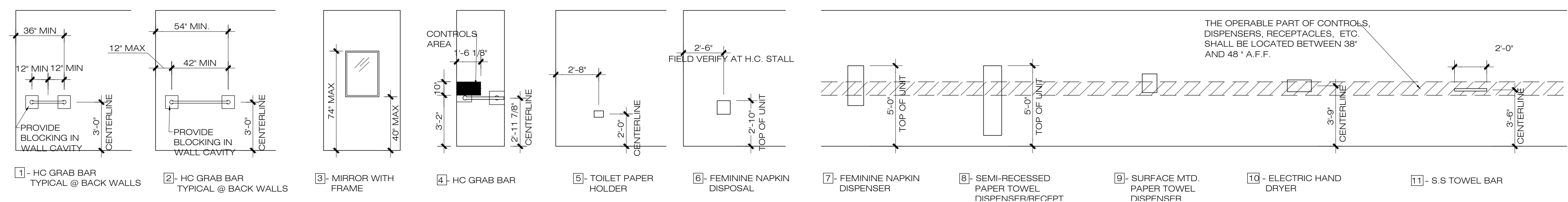
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FINISH SCHEDULE

SHEET No.

A3.3

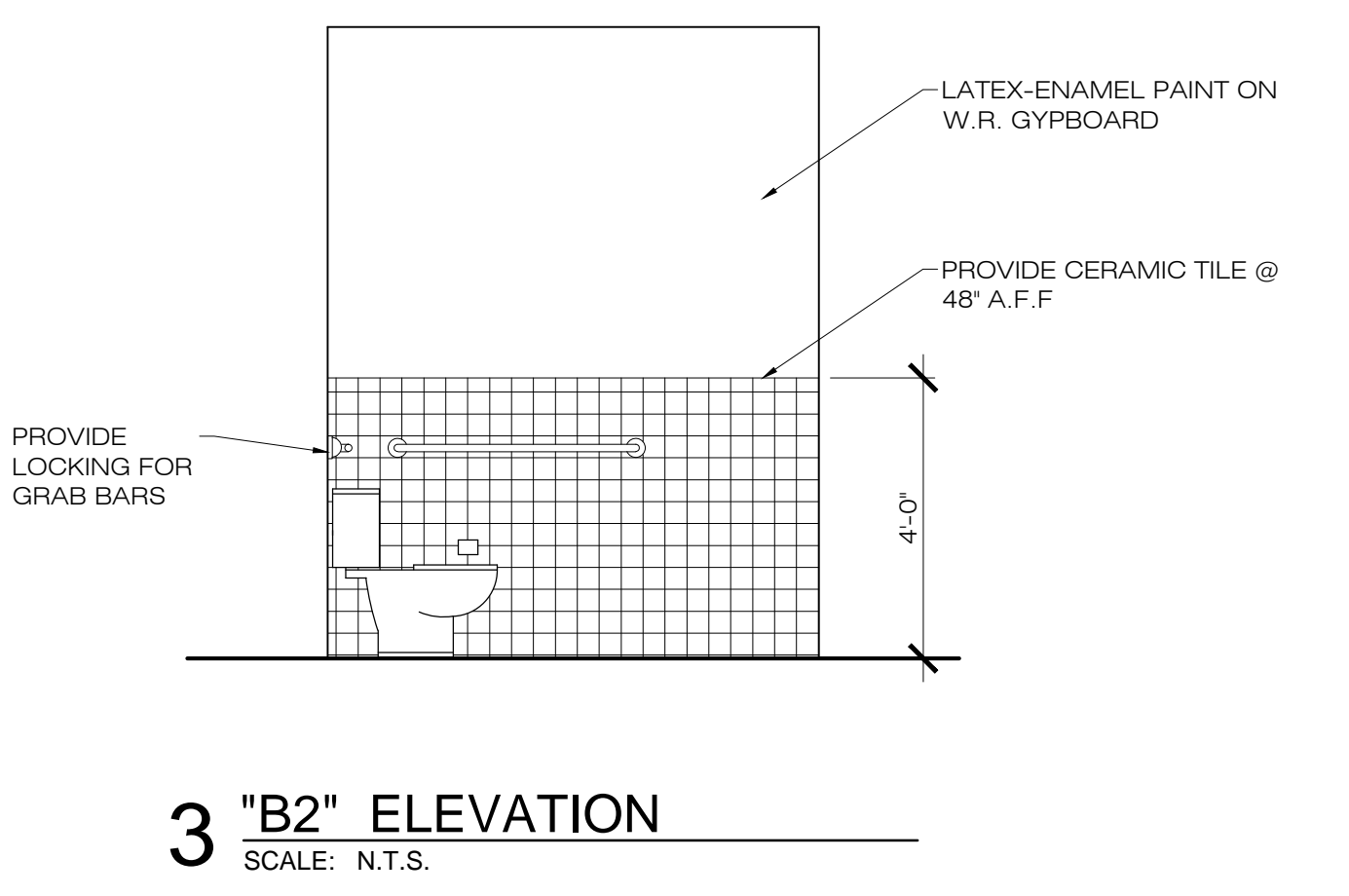
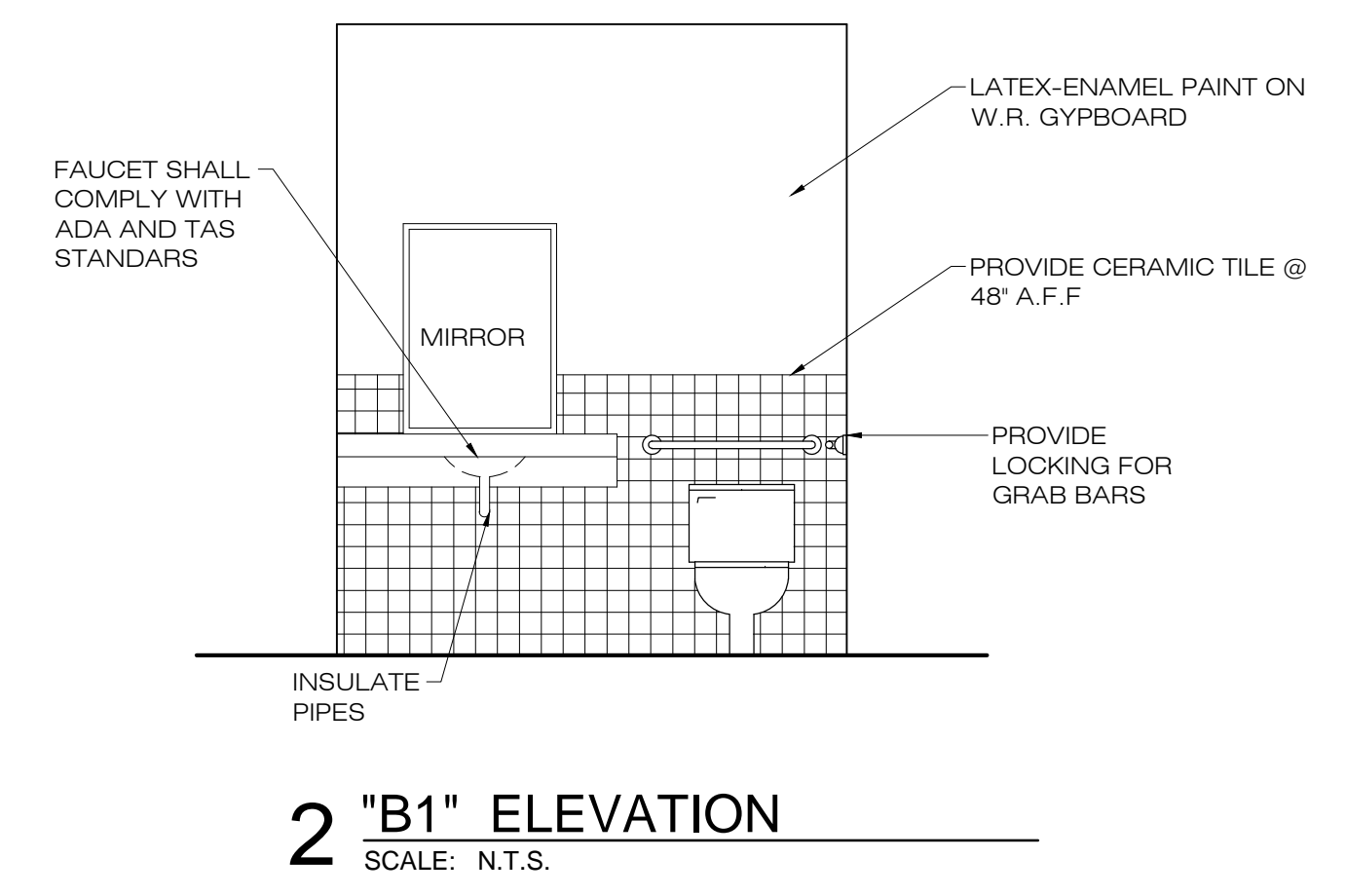
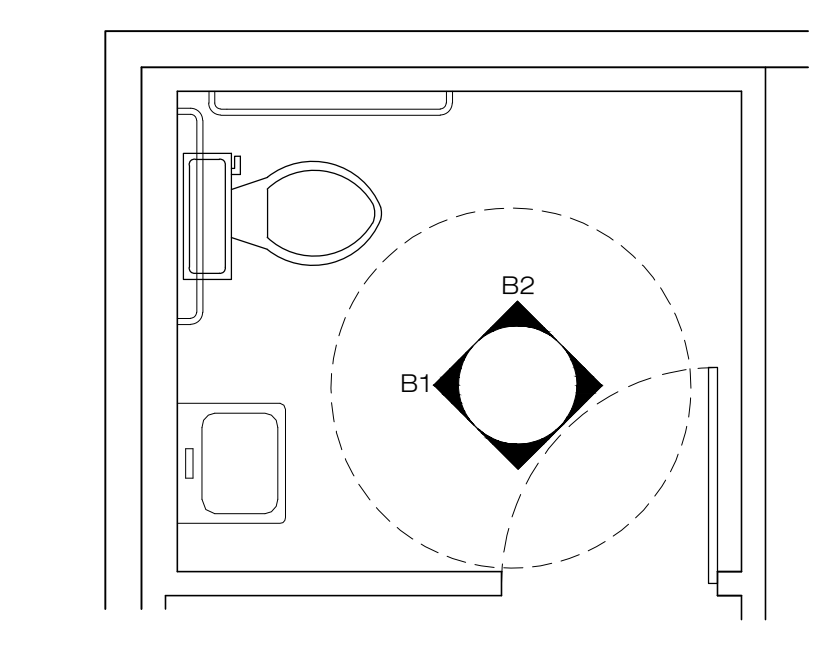
CONSULTANT



STANDARD ACCESSIBLE REQUIREMENTS
THE PROJECT OWNER AND GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROPOSED CONSTRUCTION TO COMPLY WITH THE LATEST EDITION OF 'TEXAS ACCESSIBILITY STANDARDS' AS REGULATED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION.

- HEALTH DEPARTMENT NOTES**
1. WALLS: SMOOTH, LIGHT COLORED EPOXY PAINTED.
 2. CEILINGS: LIGHT COLORED, SMOOTH, NON-ABSORBENT AND EASILY CLEANABLE
 3. LAVATORIES: TOILET ROOMS WITH HAND SOAP AND TOWEL DISPENSER.

OWNER



GRAB BARS:

- A. SIZE AND SPACING OF GRAB BARS:
THE DIAMETER OF A GRAB BAR SHALL BE 1 1/4" (MIN.). IF GRAB BARS ARE MOUNTED ADJACENT TO WALL, THE SPACES BETWEEN THE WALL AND THE GRAB BAR SHALL BE 1 1/2".
- B. STRUCTURAL STRENGTH:
THE STRUCTURAL STRENGTH OF GRAB BAR, FASTENERS, AND MOUNTING DEVICES SHALL BE CAPABLE OF SUPPORTING A STEADY FORCE OF 250 LBS. APPLIED IN ANY DIRECTION. GRAB BARS SHALL NOT ROTATE IN THEIR MOUNTING.
- C. ELIMINATING HAZARDS:
HANDRAILS AND ADJACENT WALLS OR OTHER SURFACES SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS.

HARDWARE:

- A. HARDWARE SPECIFICATIONS.
ALL HARDWARE SHALL BE LEVER TYPE OR OTHER SHAPE, (WHICH WILL PERMIT OPERATION BY WRIST OR ARM PRESSURE, AND DOES NOT REQUIRE TIGHT, GRIPPING TWISTING, OR PINCHING TO OPERATE) LOCATED NO MORE THAN 42" ABOVE THE FINISHED FLOOR. ELECTRICAL AND COMMUNICATIONS SYSTEM RECEPTACLES ON WALLS SHALL BE MOUNTED A MINIMUM HEIGHT OF 15" ABOVE THE FLOOR.
- B. MOUNTING HEIGHTS.
THE HIGHEST OPERABLE PART OF ENVIRONMENTAL AND OTHER CONTROLS, DISPENSERS, RECEPTACLES AND OTHER OPERABLE EQUIPMENT SHALL BE WITHIN AT LEAST ONE OF THE REACH RANGES SPECIFIED IN SECTION 3306 (B), AND NOT LESS THAN 36" ABOVE THE FLOOR. ELECTRICAL AND COMMUNICATIONS SYSTEM RECEPTACLES ON WALLS SHALL BE MOUNTED A MINIMUM OF 15" IN HEIGHT ABOVE THE FLOOR. DOOR HARDWARE SHALL BE MOUNTED NOT BE MORE THAN 42" ABOVE THE FINISHED FLOOR.

CONTROLS AND HARDWARE REQUIREMENTS:

- A. CONTROLS AND HARDWARE.
HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS, WINDOWS, CABINETS, PLUMBING FIXTURES AND STORAGE FACILITIES SHALL HAVE LEVER OR OTHER SHAPE WHICH WILL PERMIT OPERATION BY WRIST OR ARM PRESSURE AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING TO OPERATE .
- B. MOUNTING HEIGHTS.
THE HIGHEST OPERABLE PART OF ENVIRONMENTAL AND OTHER CONTROLS, DISPENSERS, RECEPTACLES AND OTHER OPERABLE EQUIPMENT SHALL BE WITHIN AT LEAST ONE OF THE REACH RANGES SPECIFIED IN SECTION 3306 (B), AND NOT LESS THAN 36" ABOVE THE FLOOR. ELECTRICAL AND COMMUNICATIONS SYSTEM RECEPTACLES ON WALLS SHALL BE MOUNTED A MINIMUM OF 15" IN HEIGHT ABOVE THE FLOOR. DOOR HARDWARE SHALL BE MOUNTED NOT BE MORE THAN 42" ABOVE THE FINISHED FLOOR.

4 GENERAL NOTES
SCALE: N.T.S.

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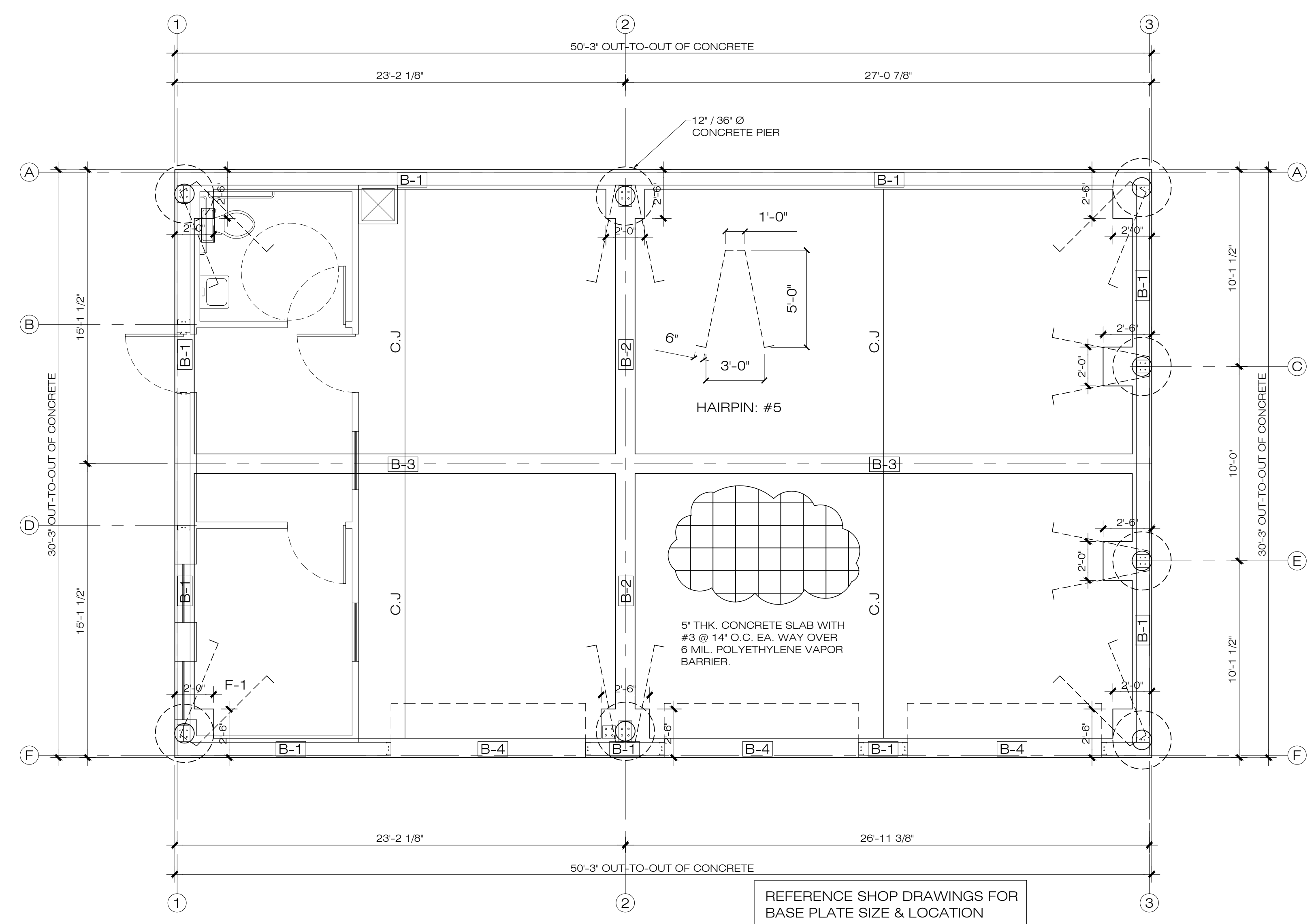
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ENLARGED RESTROOM

SHEET No.



1 FOUNDATION PLAN
SCALE: 1/4"=1'-0"

THIS DRAWING PROVIDES THE LOCATION AND SIZE OF GRADE BEAMS AND REINFORCEMENT ONLY. VERIFY ALL DIMENSIONS, DROPS, AND DOOR LOCATIONS WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING WORK. SET FORMS WITH ARCHITECTURAL DRAWINGS ONLY.
GRADE BEAMS MUST EXTEND 6" (MINIMUM) INTO ORIGINAL SOIL OR COMPACTED FILL. COMPACTION REPORT REQUIRED ON ALL NEW OR EXISTING FILL MATERIAL. GOOD POSITIVE DRAINAGE SHOULD BE MAINTAINED ALL AROUND THE HOUSE AT ALL TIMES.

PLAN NOTES:

- ALL PIERS ARE 12/36 UNLESS NOTED ON PLAN.
- REFER TO BUILDING SUPPLIERS DRAWINGS FOR ANCHOR BOLT, SETTING PLAN & LOCATIONS.
- ALL ANCHORS SHALL BE 3/4" Ø ANCHORS BOLTS
- ALL ANCHORS SHALL BE IN PLACE PRIOR TO CONCRETE POUR.
- ALL COLUMN AND BASE PLATES SHALL BE BY BUILDING SUPPLIERS.
- REPLACE EXISTING SOIL WITHIN BUILDING AS RECOMMENDED BY GEOTECHNICAL REPORT.
- SITE SHOULD BE GRADED TO SHED ALL RAIN WATER AWAY FROM STRUCTURE. NO WATER POND ALLOWED AROUND BUILDING.
- IT IS CONTRACTOR'S RESPONSIBILITY TO REVIEW THIS REPORT FOR SITE PREPARATION AND DRILLED SHAFTS. IN CASE SAND IS ENCOUNTERED AT SITE, CASING MUST BE USED FOR DRILLED SHAFTS INSTALLATION.
- CONTRACTOR TO CHECK FOR UNDERGROUND UTILITIES BEFORE DIGGING OR DRILLING FOR PIERS.
- CONFIRM ALL PIER LOCATIONS TO MATCH BUILDING COLUMN LOCATIONS PRIOR TO DRILLING.
- THE FOUNDATION SIZES WILL BE REVIEWED UPON RECEIPT OF THE COLUMN LOAD REACTIONS FROM THE METAL BUILDING MANUFACTURER AND MAY BE MODIFIED, IF REQUIRED.
- FOUNDATION - 5" THK. CONCRETE SLAB ON GRADE REINFORCED W/ #4 @ 12" O.C. EACH WAY, TOP & BOT. ON CONTINUOUS VAPOR BARRIER OVER SELECT FILL. COMPACT TO 95 STANDARD PROCTER DENSITY. (RE: SOIL REPORT FOR SOIL PREPARATION).
- ALL SLOPES ARE 1/8" PER FT. U.N.O
- ELEVATIONS SHOWN ARE REFERENCED TO F.F. EL. = +0'-0".
- NO SLAB DEPRESS @ EXTERIOR DOORS
- PROVIDE 1/2" (U.N.O.) EXPANSION JOINT (E.J) W/ SEALANT @ ALL EXTERIOR / INTERIOR SLAB JOINTS. COORD. SLAB DEPRESSION & FLOOR DRAIN W/ ARCH & MEP DWGS

2 GENERAL NOTES
SCALE: N.T.S.

NOTES - CONCRETE

- VERIFY ALL DIMENSIONS AND ELEVATIONS OF RECESS, LEDGES AND STEPS BEFORE COMMENCEMENT OF FORM WORK.
- CONCRETE SHALL NOT BE PLACED IN FREEZING OR RAINY WEATHER.
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318 WITH LATEST REVISIONS.
- CRUSHED STONE AND GRAVEL CONCRETE SHALL HAVE MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- 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.
- REINFORCING STEEL MINIMUM COVERAGE UNLESS NOTED ON REBAR CHAIRS SHALL BE:
FOOTINGS 3" BOT., 3" SIDES & 2" TOP
GRADE BEAMS 3" FROM EARTH
SLAB 2-1/2" FROM VAPOR BARRIER
- CHAMFER ALL EXPOSED EDGES 3/4" AT 45 DEGREES.
- 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.
- 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 BUILDING CODE.
- 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.

3 CONCRETE NOTES
SCALE: N.T.S.

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FOUNDATION PLAN

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PIER LOCATION

SHEET No.

S1.2

THIS DRAWING PROVIDES THE LOCATION AND SIZE OF GRADE BEAMS AND REINFORCEMENT ONLY. VERIFY ALL DIMENSIONS, DROPS, AND DOOR LOCATIONS WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING WORK. SET FORMS WITH ARCHITECTURAL DRAWINGS ONLY.
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PLAN NOTES:

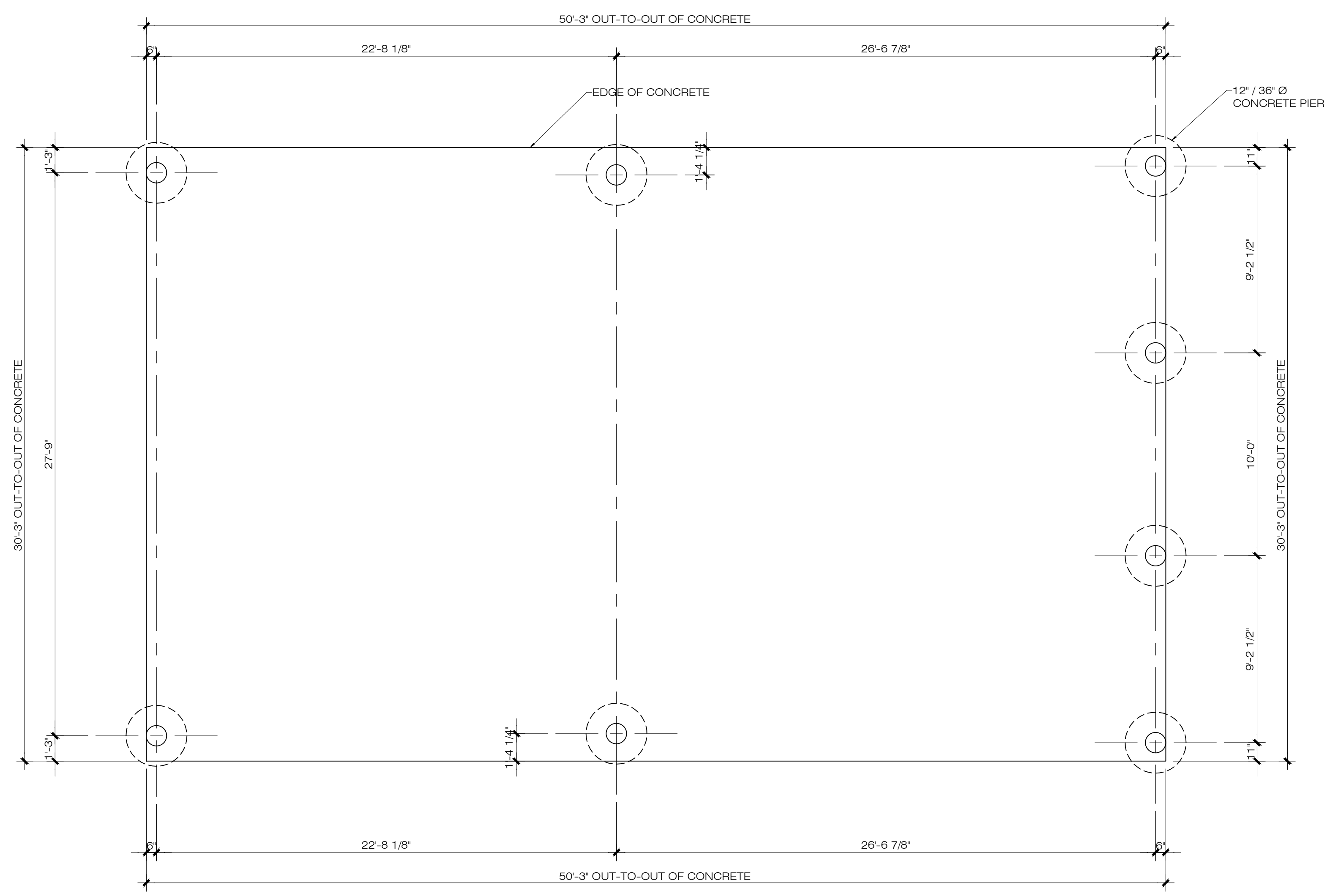
- ALL PIERS ARE 12/36 UNLESS NOTED ON PLAN.
- REFER TO BUILDING SUPPLIERS DRAWINGS FOR ANCHOR BOLT, SETTING PLAN & LOCATIONS.
- ALL ANCHORS SHALL BE 3/4" Ø ANCHORS BOLTS
- ALL ANCHORS SHALL BE IN PLACE PRIOR TO CONCRETE POUR.
- ALL COLUMN AND BASE PLATES SHALL BE BY BUILDING SUPPLIERS.
- REPLACE EXISTING SOIL WITHIN BUILDING AS RECOMMENDED BY GEOTECHNICAL REPORT.
- SITE SHOULD BE GRADED TO SHED ALL RAIN WATER AWAY FROM STRUCTURE. NO WATER POND ALLOWED AROUND BUILDING.
- IT IS CONTRACTOR'S RESPONSIBILITY TO REVIEW THIS REPORT FOR SITE PREPARATION AND DRILLED SHAFTS. IN CASE SAND IS ENCOUNTER AT SITE, CASING MUST BE USED FOR DRILLED SHAFTS INSTALLATION.
- CONTRACTOR TO CHECK FOR UNDERGROUND UTILITIES BEFORE DIGGING OR DRILLING FOR PIERS.
- CONFIRM ALL PIER LOCATIONS TO MATCH BUILDING COLUMN LOCATIONS PRIOR TO DRILLING.
- THE FOUNDATION SIZES WILL BE REVIEWED UPON RECEIPT OF THE COLUMN LOAD REACTIONS FROM THE METAL BUILDING MANUFACTURER AND MAY BE MODIFIED, IF REQUIRED.
- FOUNDATION - 5" CONCRETE SLAB ON GRADE REINFORCED W/#4 @12" O.C. EACH WAY, TOP & BOT. ON CONTINUOUS VAPOR BARRIER OVER SELECT FILL. COMPACT TO 95 STANDARD PROCTER DENSITY. (RE: SOIL REPORT FOR SOIL PREPARATION).
- ALL SLOPES ARE 1/8" PER FT. U.N.O
- ELEVATIONS SHOWN ARE REFERENCED TO F.F. EL. = +0'-0".
- NO SLAB DEPRESS @ EXTERIOR DOORS
- PROVIDE 1/2" (U.N.O.) EXPANSION JOINT (EJ) W/ SEALANT @ ALL EXTERIOR / INTERIOR SLAB JOINTS. COORD. SLAB DEPRESSION & FLOOR DRAIN W/ ARCH & MEP DWGS

2 GENERAL NOTES
SCALE: N.T.S.

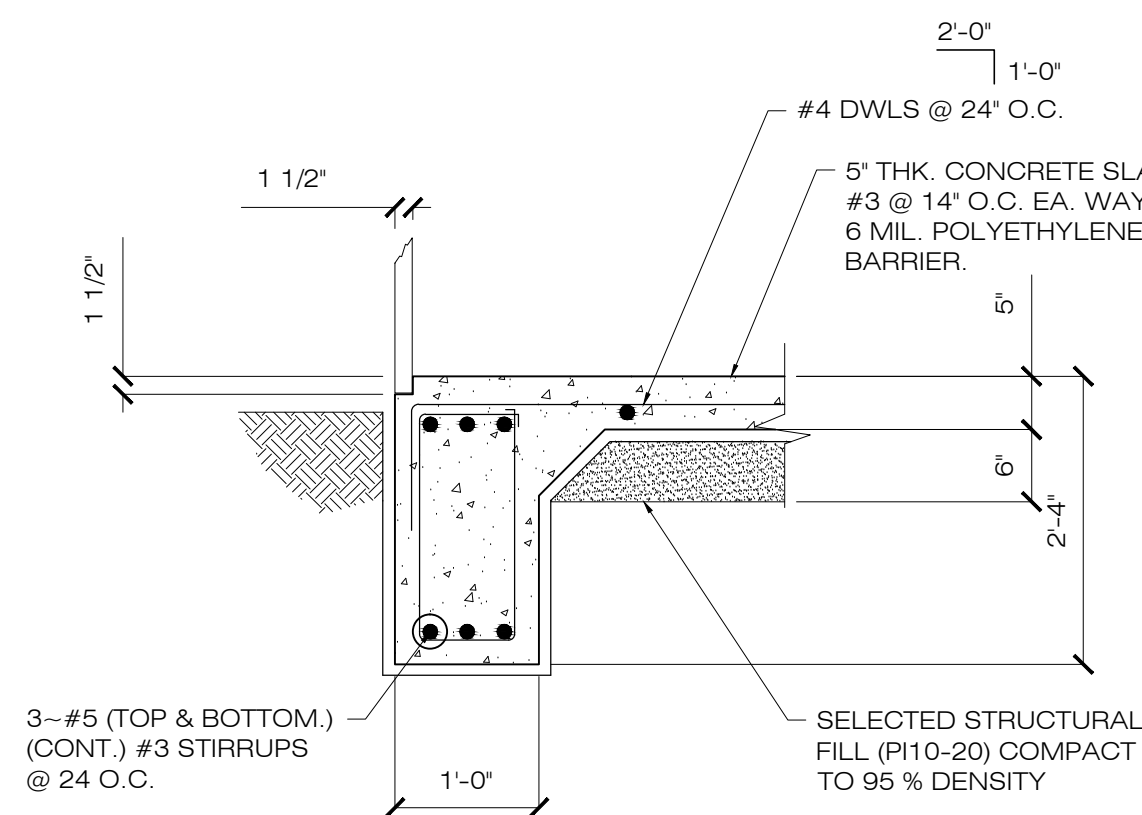
NOTES - CONCRETE

- VERIFY ALL DIMENSIONS AND ELEVATIONS OF RECESS, LEDGES AND STEPS BEFORE COMMENCEMENT OF FORM WORK
- 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.
- 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.
- REINFORCING STEEL MINIMUM COVERAGE UNLESS NOTED ON REBAR CHAIRS SHALL BE:
FOOTINGS 3" BOT., 3" SIDES & 2" TOP
GRADE BEAMS 3" FROM EARTH
SLAB 2-1/2" FROM VAPOR BARRIER
- CHAMFER ALL EXPOSED EDGES 3/4" AT 45 DEGREES.
- 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.
- 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 BUILDING CODE.
- 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.

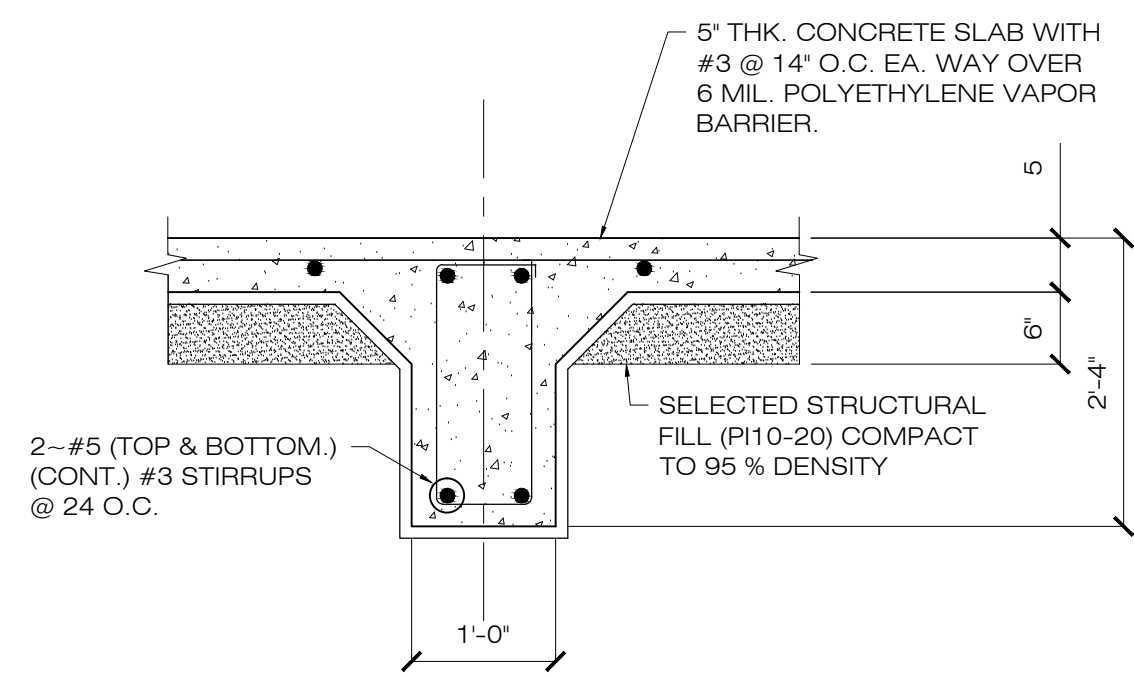
3 CONCRETE NOTES
SCALE: N.T.S.



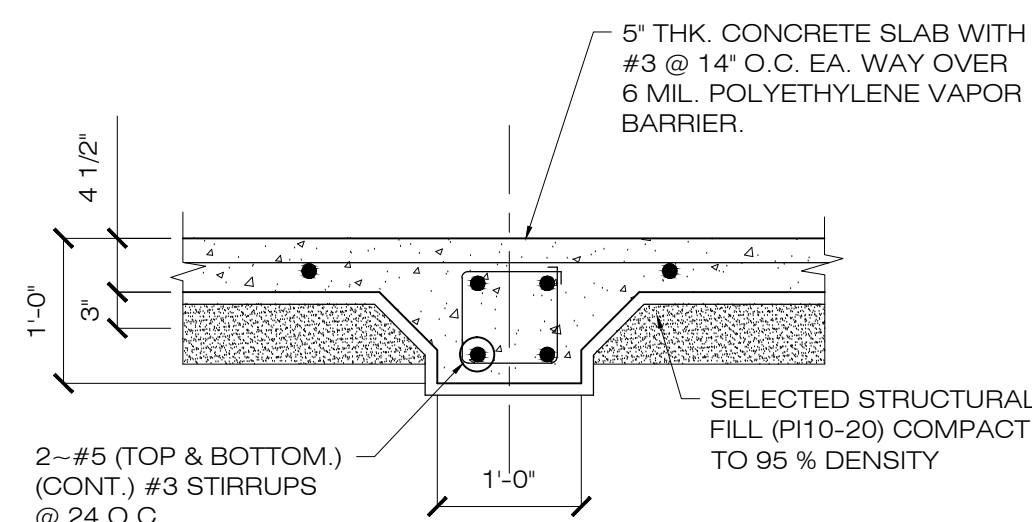
1 PIER LOCATION
SCALE: 1/4"=1'-0"



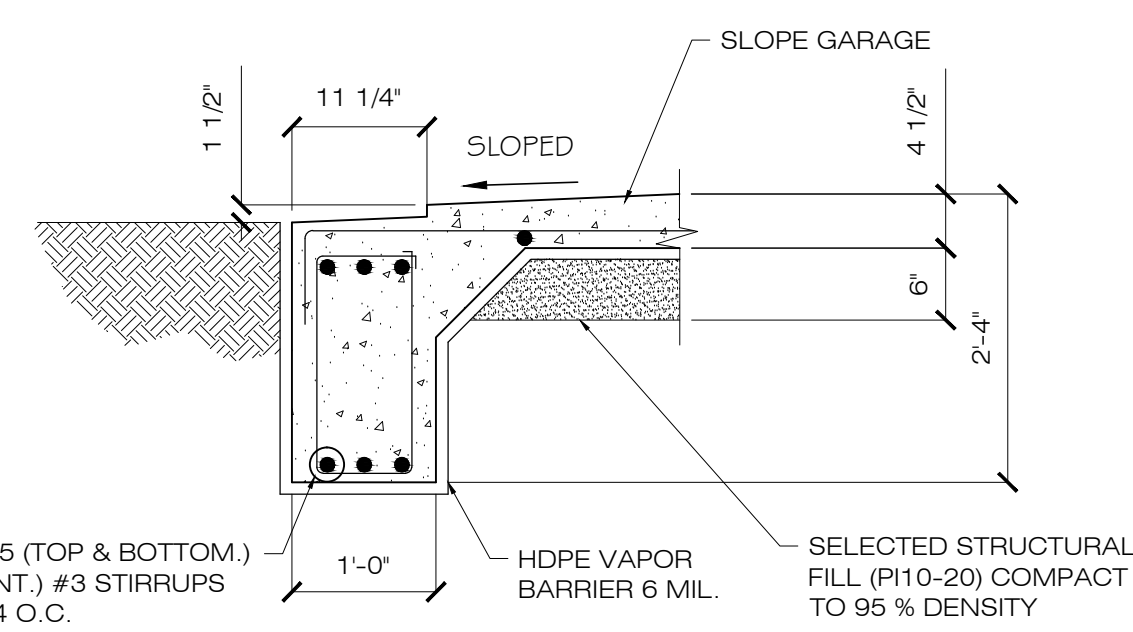
1 FOUNDATION DETAIL "B-1"
SCALE: N.T.S.



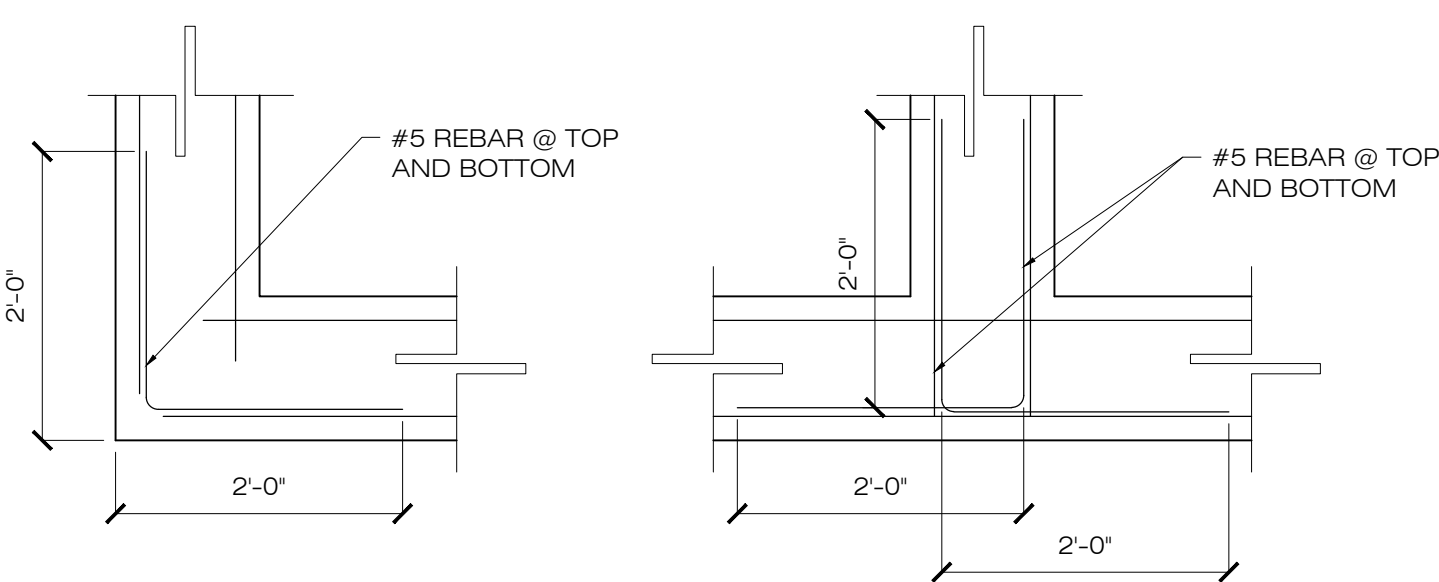
2 FOUNDATION DETAIL "B-2"
SCALE: N.T.S.



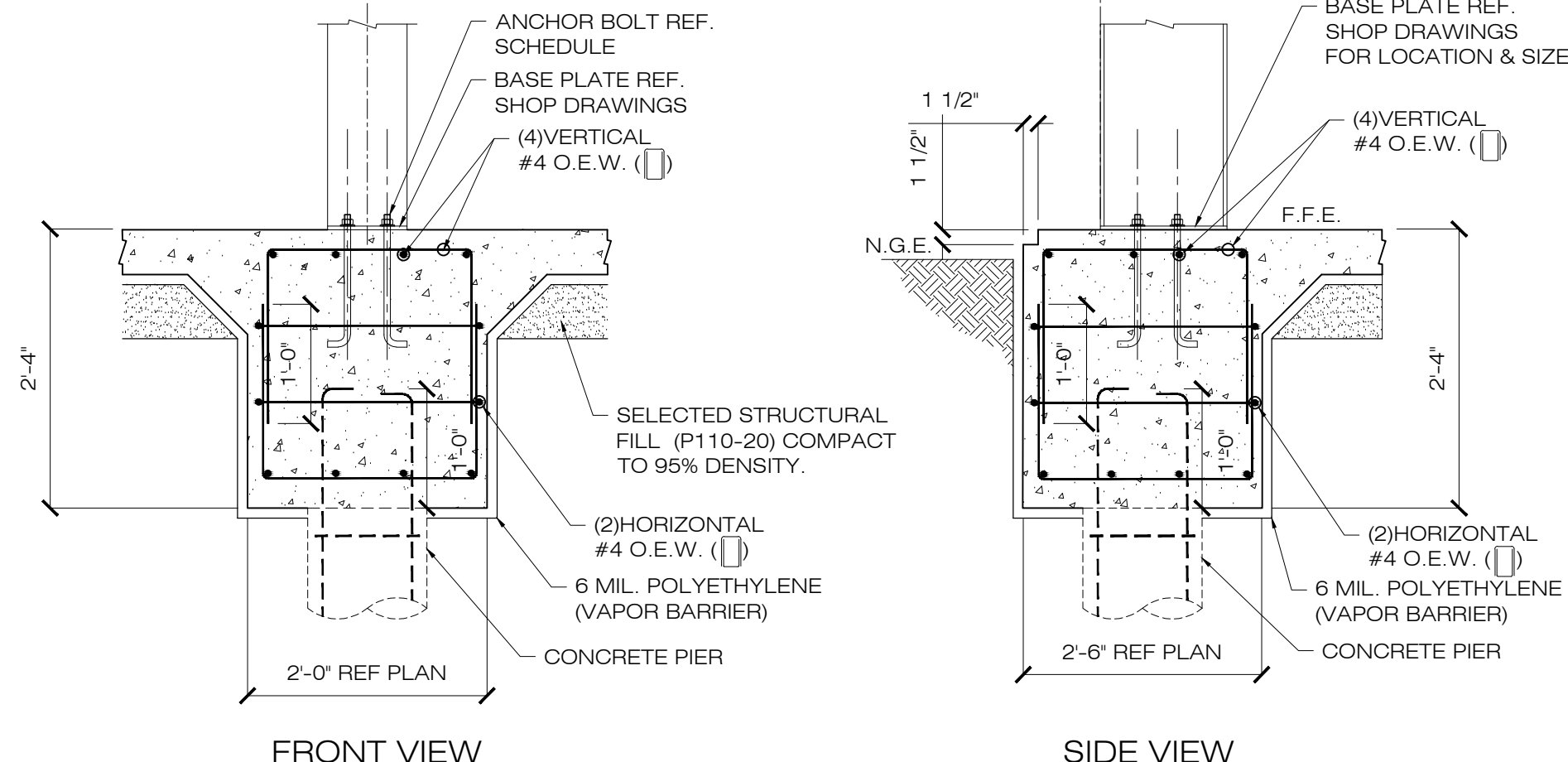
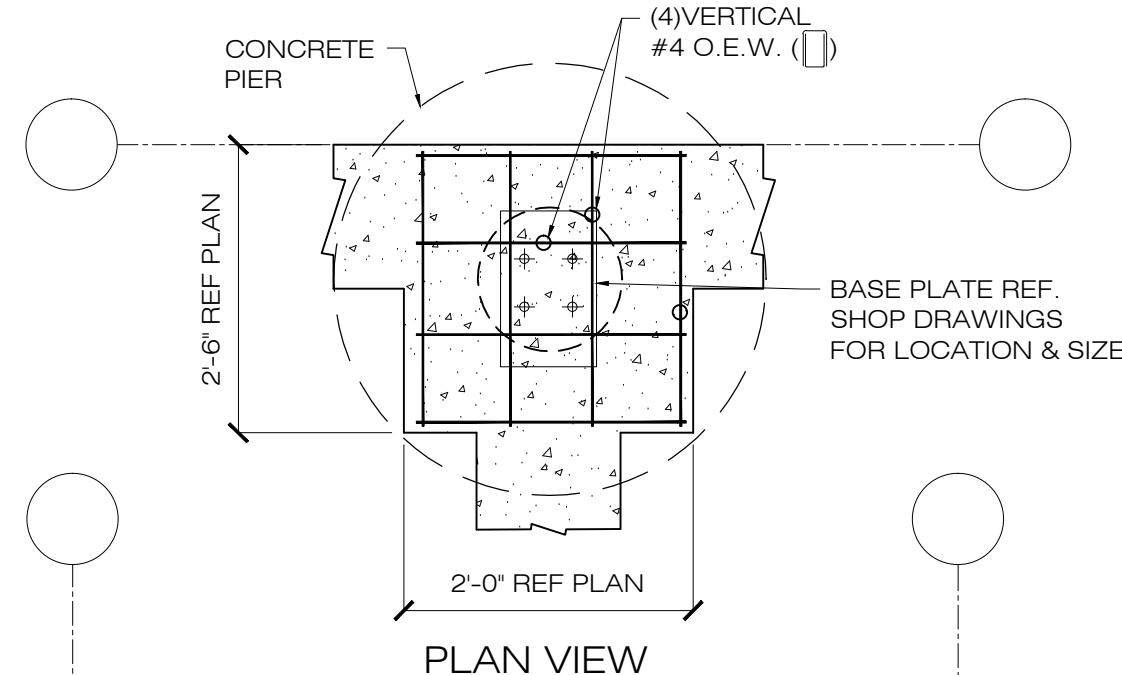
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SCALE: N.T.S.



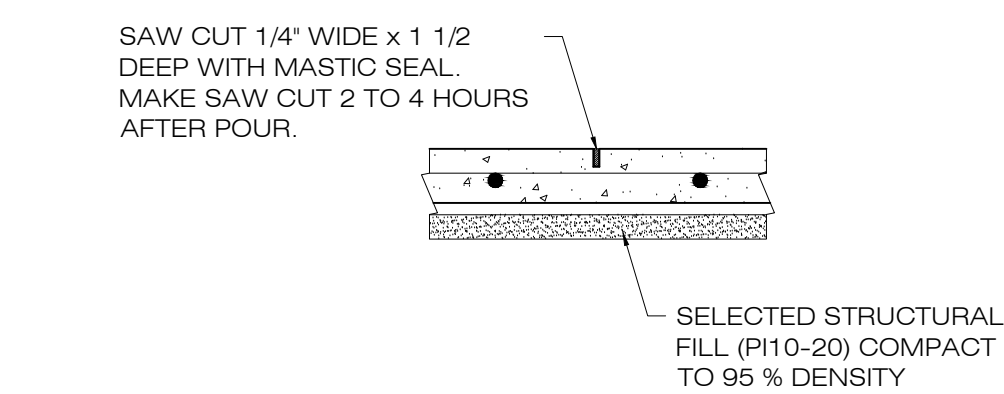
4 FOUNDATION DETAIL "B-4"
SCALE: N.T.S.



5 CORNERS DETAIL
SCALE: N.T.S.

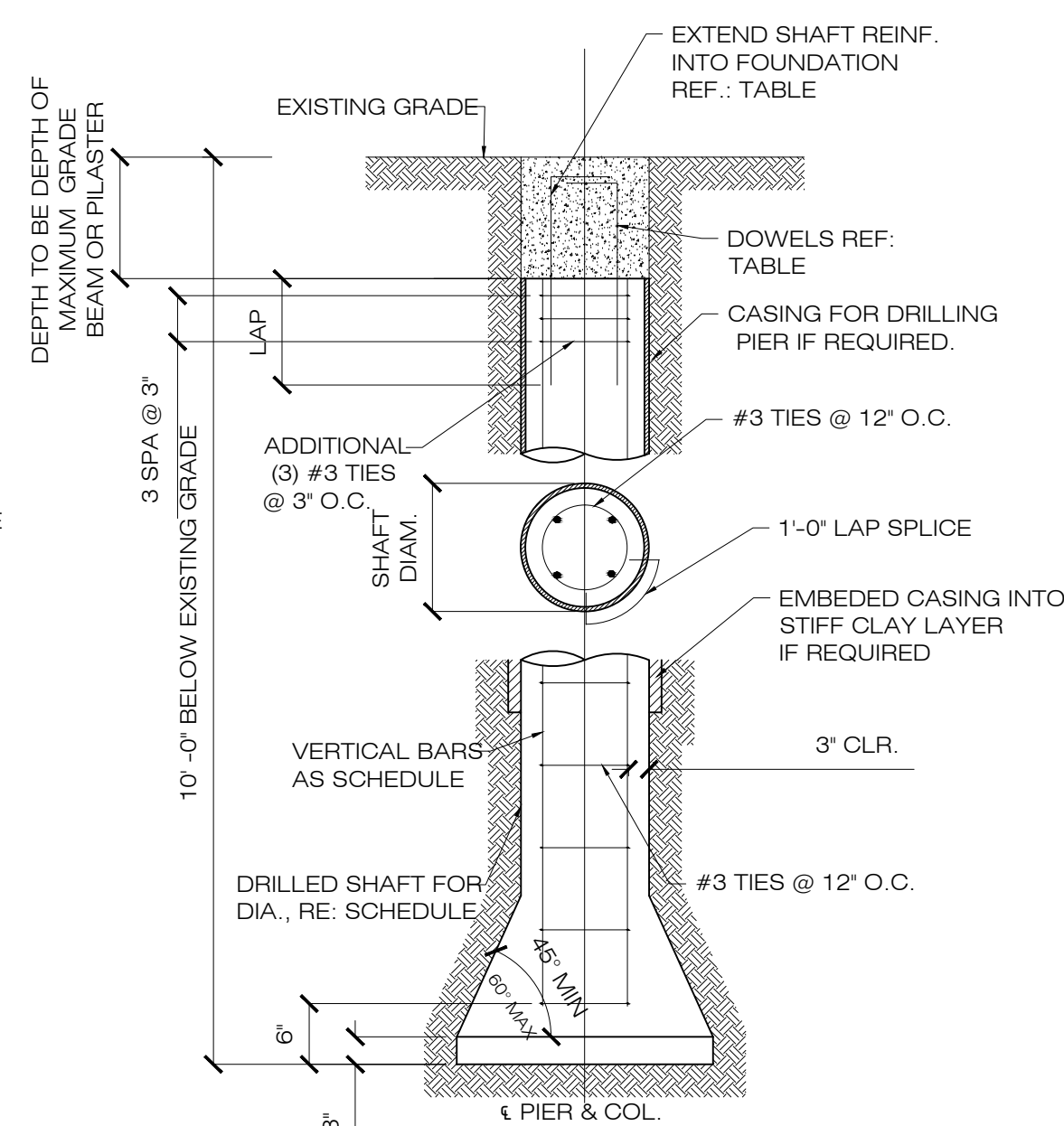


7 DETAIL "F-1"
SCALE: N.T.S.

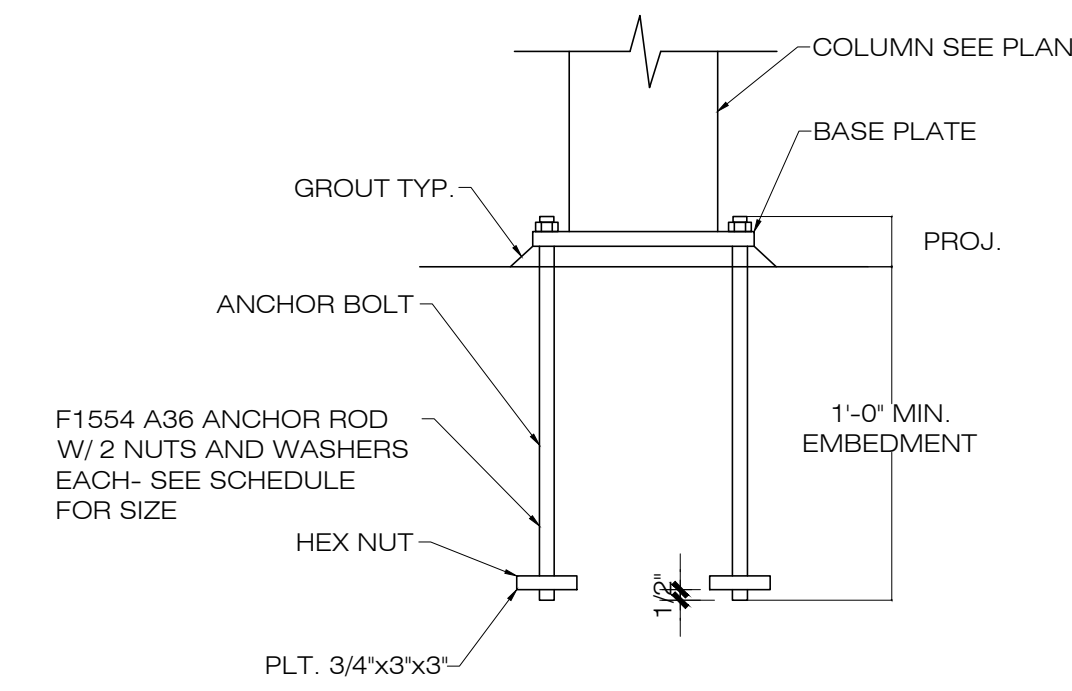


6 CONTROL JOINT DETAIL
SCALE: N.T.S.

DRILLED PIER SCHEDULE				
SHAFT DIA.	BELL DIA.	VERT. BARS	TIES	TYP. DOWELS
12"	36"	(4) #5	#3 @ 12"	(4) #5
18"	54"	(6) #5	#3 @ 12"	(6) #5



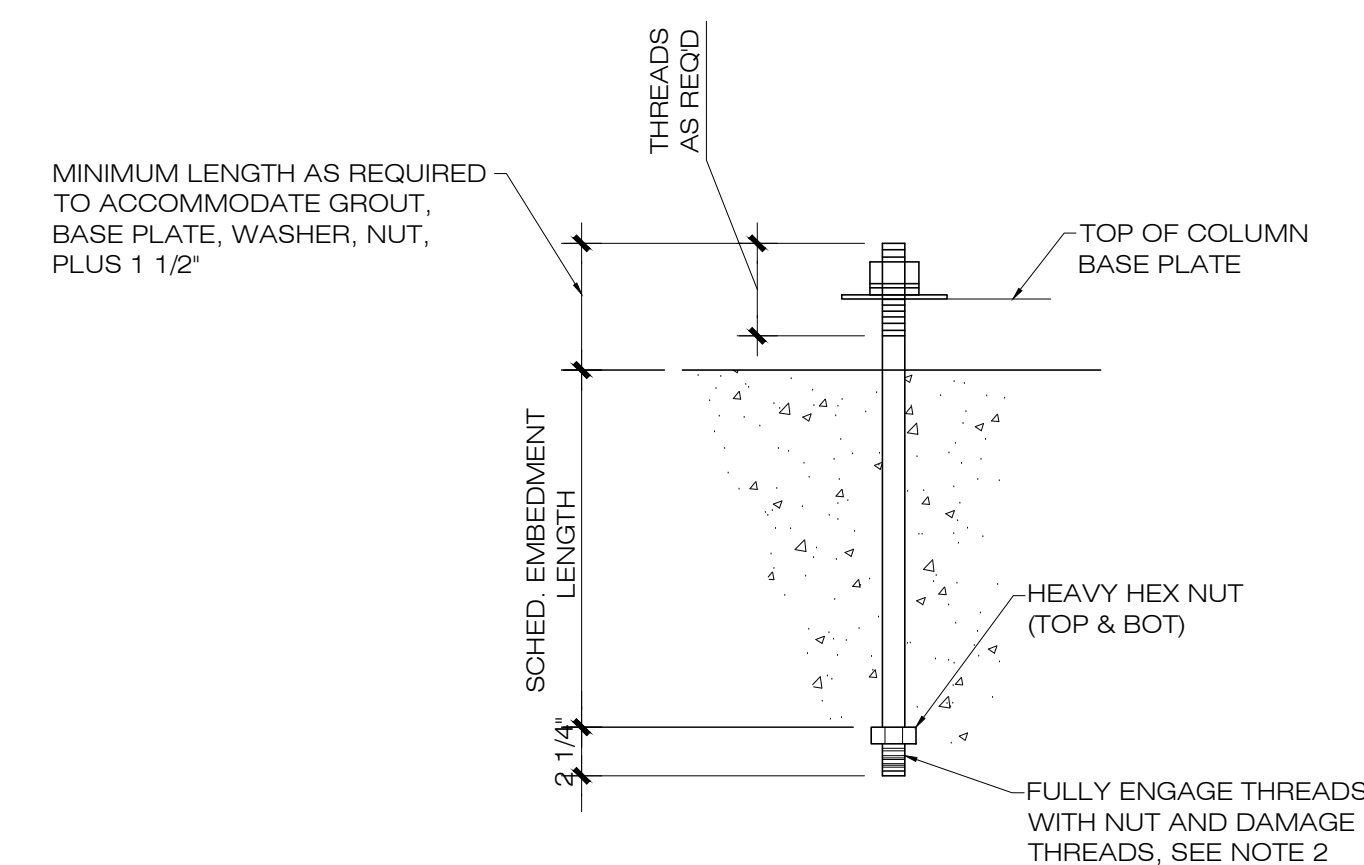
8 PIER DETAIL
SCALE: N.T.S.



ANCHOR BOLT SCHEDULE (SEE SHOP DRAWING)		
ANCHOR BOLT DIAMETER	PROJECTION	EMBEDMENT
5/8"	5'	12'
3/4"	5'	15'
1"	5'	18'

- NOTES:
- SIZE WELDS PER AISC MINIMUM FILLET REQUIREMENTS (4 SIDES TYP.) (1/4" MIN)
 - ANCHOR ROD HOLES IN BASE PLATES AND MINIMUM WASHER DIAM. SHALL BE SIZED IN ACCORDANCE WITH TABLE 14-2 OF THE AISC MANUAL OF STEEL CONSTRUCTION, 3rd ED.
 - WASHER SHALL BE INSTALLED OVER OVERSIZED HOLES.
 - CONTRACTOR SHALL PROVIDE 1/8" THICK TEMPLATE FOR ANCHOR BOLT INSTALLATION.
 - USE EPOXY ANCHORS ON EXISTING SLAB

9 TYP. BASE PLATE DETAIL
SCALE: N.T.S.



- NOTES:
- SEE COLUMN SCHEDULE FOR ANCHOR BOLT SIZE
 - ROD THREADS AT THE EMBEDDED END SHALL BE DAMAGED AT TWO PLACES DIRECTLY BELOW THE HEAVY HEX NUT
 - UNLESS NOTED OTHERWISE, ALL BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC AFTER THE CONCRETE IS AT LEAST 14 DAYS OLD.
 - THE HOLE IN THE PLATE WASHER SHALL BE 1/16" LARGER THAN THE BOLT DIAMETER.
 - SEE SPECIFICATION AND STRUCTURAL NOTES FOR GROUT REQUIREMENTS.

10 TYP. ANCHOR BOLT DETAIL
SCALE: N.T.S.

ISSUE LOG	
DATE	DESCRIPTION
PRE	
PMT	

PROJECT NO:
CHECKED BY: M.A.T
DATE OF ISSUE:
SHEET No.

FOUNDATION DETAILS

SHEET No.

CONSULTANT

OWNER

NEW OFFICE/WAREHOUSE
6817 ROANOKE ST.
HOUSTON TX. 77028

ISSUE LOG

	DATE	DESCRIPTION
PRE		
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PROJECT NO:

CHECKED BY: M.A.T

DATE OF ISSUE:

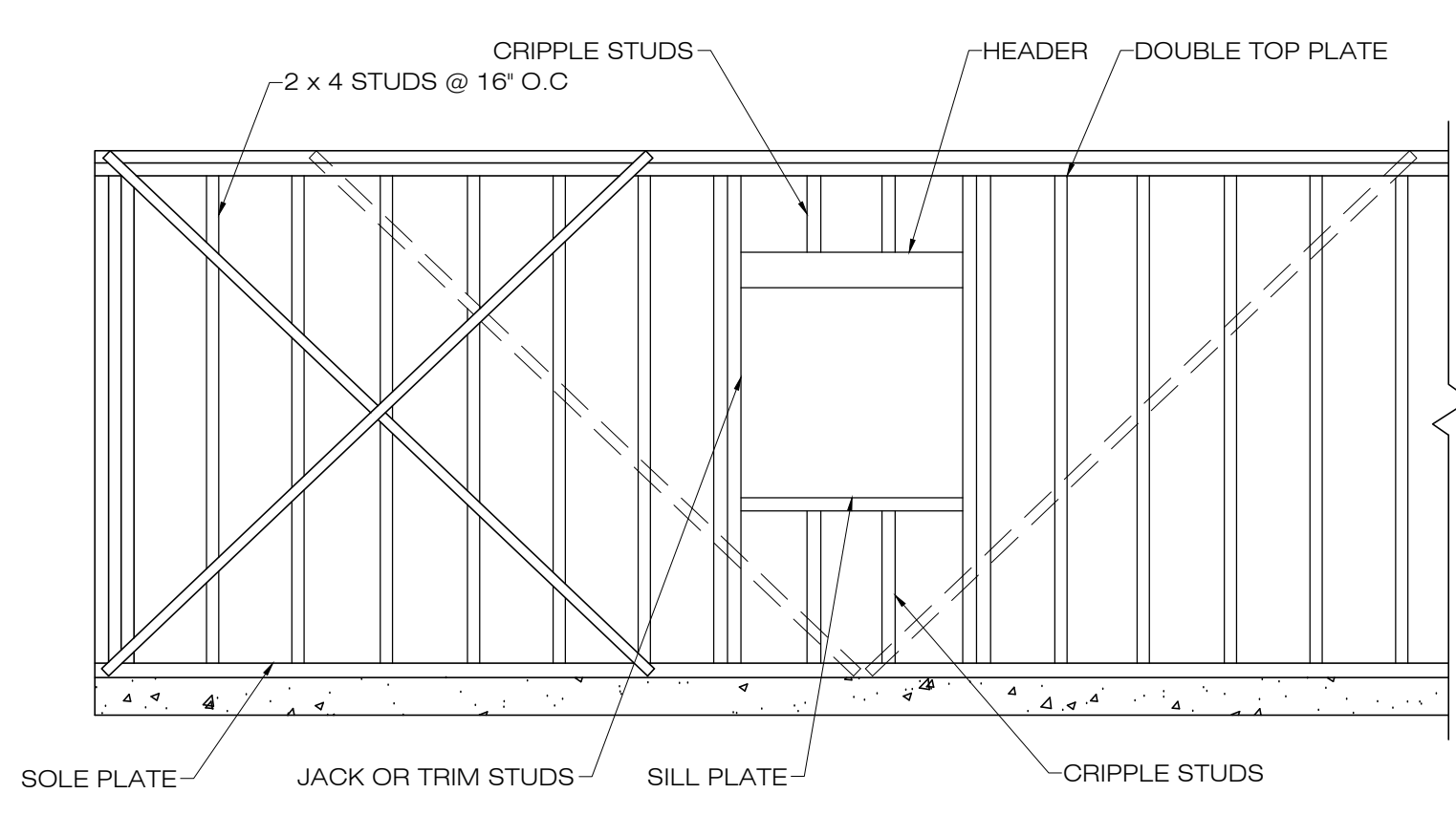
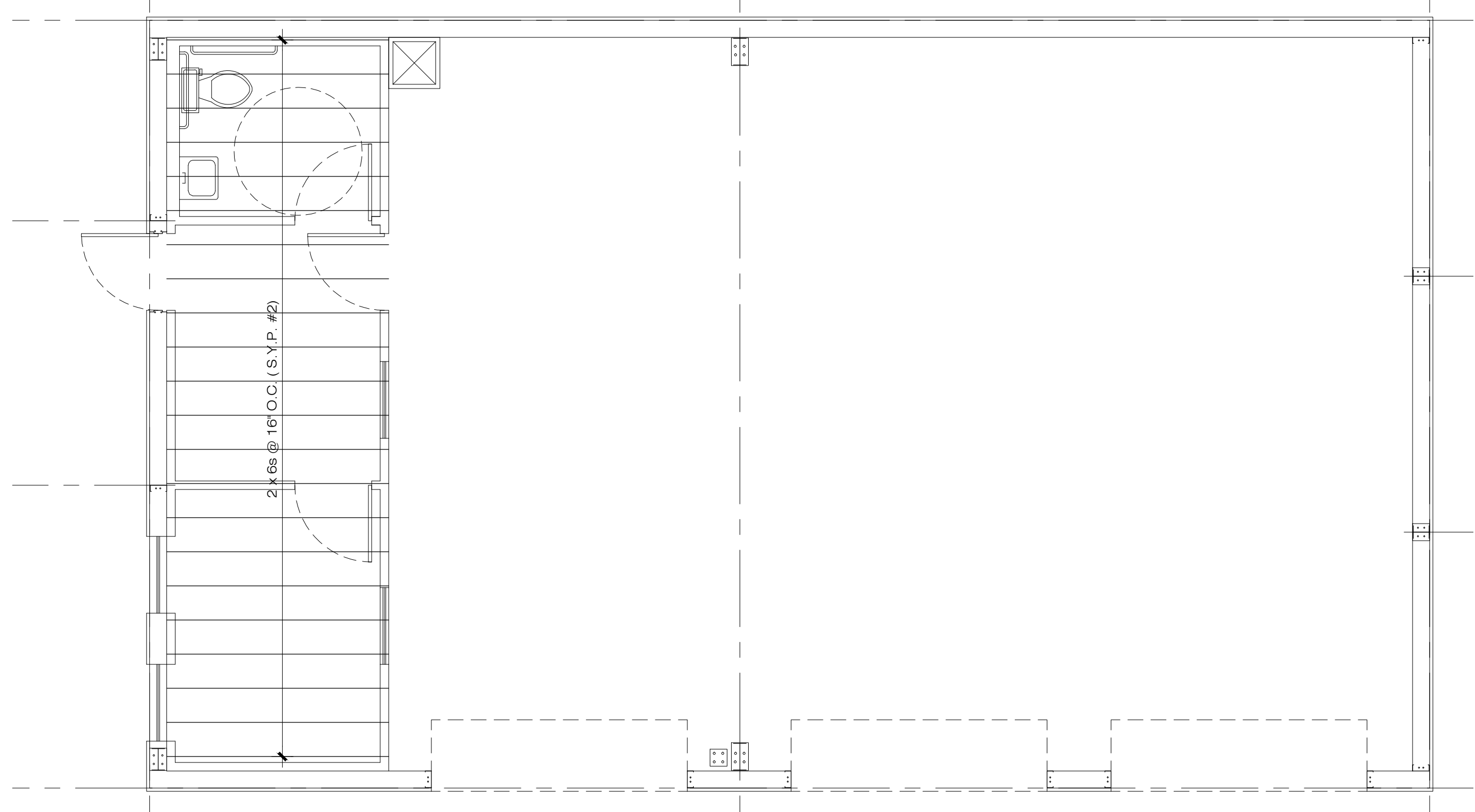
SHEET No.

CEILING JOIST PLAN

SHEET No.

S2.0

WIND LOAD 135 MPH
CEILING LIVE LOAD = 20 PSF
CEILING DEAD LOAD = 10 PSF



NOTE:
SEE PLAN FOR SHEATHING AND ATTACHMENT REQMENTS - STUD PLATES TIES NOT SHOWN - SEE OTHER SECTION FOR REQUIREMENTS - TYP.

WB OR WBC WALL BRACING 'X' AND 'V' APPLICATIONS

GENERAL FRAMING NOTES

- ** CONTRACTOR / OWNER SHALL VERIFY FIELD DIMENSIONS AND DETAILS, NOTIFY THE PROJECT OF ANY DISCREPANCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES.**
- ** CONTRACTOR / OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.**
- ** THIS RAFTER LAYOUT IS DESIGNED TO SUPPORT COMPOSITION ROOF SHINGLES ONLY U.N.O. PLEASE CONSULT ENGINEER IF ANY OTHER TYPE OF ROOF COVERING IS TO BE USED.**

FRAMING

- ALL RAFTERS SHALL BE 2X6S NO. 2 S.Y.P @ 16" ON CENTER W/ 2X8 HIP AND VALLEY RAFTERS AND 2X10 RIDGE UNLESS NOTED OTHERWISE (U.N.O.)
- UNLESS NOTED OTHERWISE ON PLAN, DO NOT SUPPORT ANY CHIMNEY UPON RAFTERS. EXTEND WALLS OF CHIMNEY THROUGH THE RAFTERS TO BEAR UPON WALLS OR BEAMS BELOW, SURROUNDING RAFTERS TO BE SUPPORTED BY CHIMNEY WALLS.
- PURLINS SHALL BE SIZED NO LESS THAN THE RAFTER PURLINS MUST BE CONTINUOUS AND SUPPORTED BY 2X4 STRUTS INSTALLED TO BEARING WALLS AT A SLOPE NOT LESS THAN 45° FROM THE HORIZONTAL. THE STRUTS SHALL BE SPACED NOT MORE THAN 4'-0" O.C. AND UNBRACED LENGTH OF STRUTS SHALL NOT EXCEED 8'-0".
- PROVIDE BLOCKING AT BRACE LOCATIONS (U.N.O.)
- PROVIDE 2X6 COLLAR TIES 48" O.C. IN THE UPPER THIRD OF THE ATTIC (U.N.O.)
- ROOF DECKING SHALL BE 1/2" EXPOSURE, 1 CDX OR WATERBOARD APA RATED SHEATHING (24/0)
- THE NUMBER AND SIZE OF NAILS USED TO CONNECT WOOD MEMBERS SHALL BE ACCORDING TO TABLE 25Q OF THE HOUSTON/IBC BUILDING CODE IS APPLICABLE (U.N.O.). MULTIPLE STUDS SHALL BE GLUED SECURED WITH 100 NAILS SPACED 24" O.C. MULTIPLE JOISTS SHALL BE NAILED WITH 3-16D NAILS SPACED 12" O.C. THERE SHALL BE NO SPLICES.

CEILING

- ALL CEILING JOISTS SHALL BE 2X6 'S NO. 2 S.Y.P. 16" ON CENTER UNLESS NOTED OTHERWISE (U.N.O.)
- DO NOT BRACE ROOF UPON CEILING JOISTS OR STRONGBACKS.
- ALL FLOATING BEAMS 1 1/2" ABOVE CEILING OR HEADER SCHEDULE AS FOLLOWS:

***ALL HEADER MATERIAL TO BE NO. 2 S.Y.P. GRADE LUMBER *** (UNLESS NOTED OTHERWISE)

HEADER SIZE	SUPPORTING ROOF ONLY	ONE STORY ABOVE	TWO STORIES ABOVE
2-2X6	6'-0"	4'-0"	-
2-2X8	8'-0"	6'-0"	-
2-2X10	10'-0"	8'-0"	8'-0"
2-2X12	12'-0"	10'-0"	8'-0"

ALL BEAM AND HEADERS: MATERIAL SHALL BE NO. 2 S.Y.P.

- ALL BEAMS FRAMING TO WALLS ARE TO BE SUPPORTED BY A MINIMUM OF (2) 2X4 OR (2) 2X6 STUDS UNLESS NOTED OTHERWISE. GLUED LAM. BEAM TO BE DOUGLAS-FIR AND INSTALLED PER THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION. FY - 2400 PSI, E = 1,800 PSI.
- STEEL FLITCH BEAMS TO BE CONSTRUCTED WITH TWO ROWS OF 1/2" DIA. BOLTS SPACED AT 24" O.C. AND STAGGERED TOP AND BOTTOM (PROVIDE (2) BOLTS AT EACH END OF BEAM). HOLES SHALL BE 9/16" DIA. AND DRILLED EDGE CLEARANCE SHALL BE 1 1/2" FOR ALL BOLTS. WHEN ONE FLITCH BEAM IS "TEED" INTO ANOTHER THE BEAM SHALL BE SUPPORTED BY A SIMPSON EGS HANGER. EDGE CLEARANCE SHALL BE 1-1/2" FOR ALL BOLTS. WOOD SHALL BE NO. 2 S.Y.P. AND BOTH STEEL AND WOOD SHALL BE CONTINUOUS (U.N.O.)
- PROVIDE DOUBLE JOISTS UNDER EQUIPMENT AND STORAGE AREAS IN ATTIC.
- PROVIDE A 1 1/2" MIN. BEARING EACH END FOR ALL BEAMS AND HEADERS (TYPICAL UNLESS NOTED OTHERWISE ON PLAN)
- MULTIPLE STUDS SHALL BE GLUED AND NAILED WITH 100 NAILS 24" O.C. MULTIPLE JOIST SHALL BE GLUED AND NAILED WITH 3-16D NAILS 12" O.C. THERE SHALL BE NO SPLICES
- ALL JOISTS FRAMING TO FLUSH BEAMS SHALL BE SUPPORTED BY U JOIST METAL HANGERS (U.N.O.)
- ALL STEEL SHALL CONFORM TO ASTM A - 36 STEEL. COLUMNS SHALL HAVE MIN. 1/2" CAP AND BASEPLATES WITH MIN. 2-5/8" DIA. ANCHORED BOLTS EMBEDDED MIN. 4-1/2" INTO SOLID CONCRETE. THE STEEL ANGLE LINTEL SCHEDULE (TO SUPPORT STONE) IS AS FOLLOWS FORM SHAPE TO MATCH ARCHES WHERE NECESSARY)

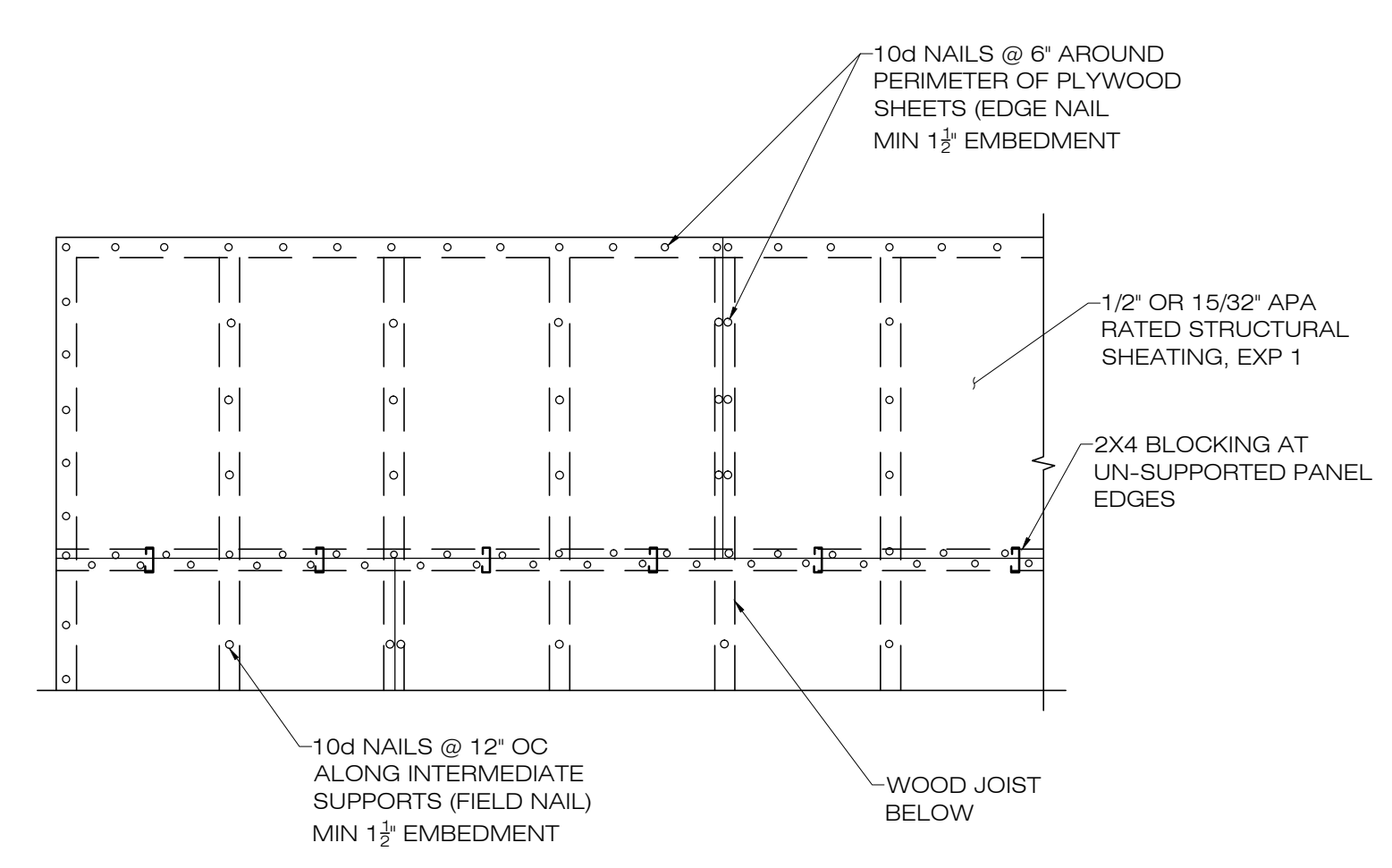
MAXIMUM SPAN	MINIMUM SIZE	MINIMUM BEARING
6'-0"	L 3 1/2 X 3 1/2 X 5/16	6"
7'-0"	L 4 X 3 1/2 X 5/16	6"
8'-0"	L 5 X 3 1/2 X 3/8	6"
9'-0"	L 5 X 3 1/2 X 3/8	8"
10'-0"	L 6 X 4 X 3/8	8"

- 2 COATS OF RUST RESISTANT PAINT TO BE APPLIED TO ENTIRE SURFACE OF STEEL.

WALLS

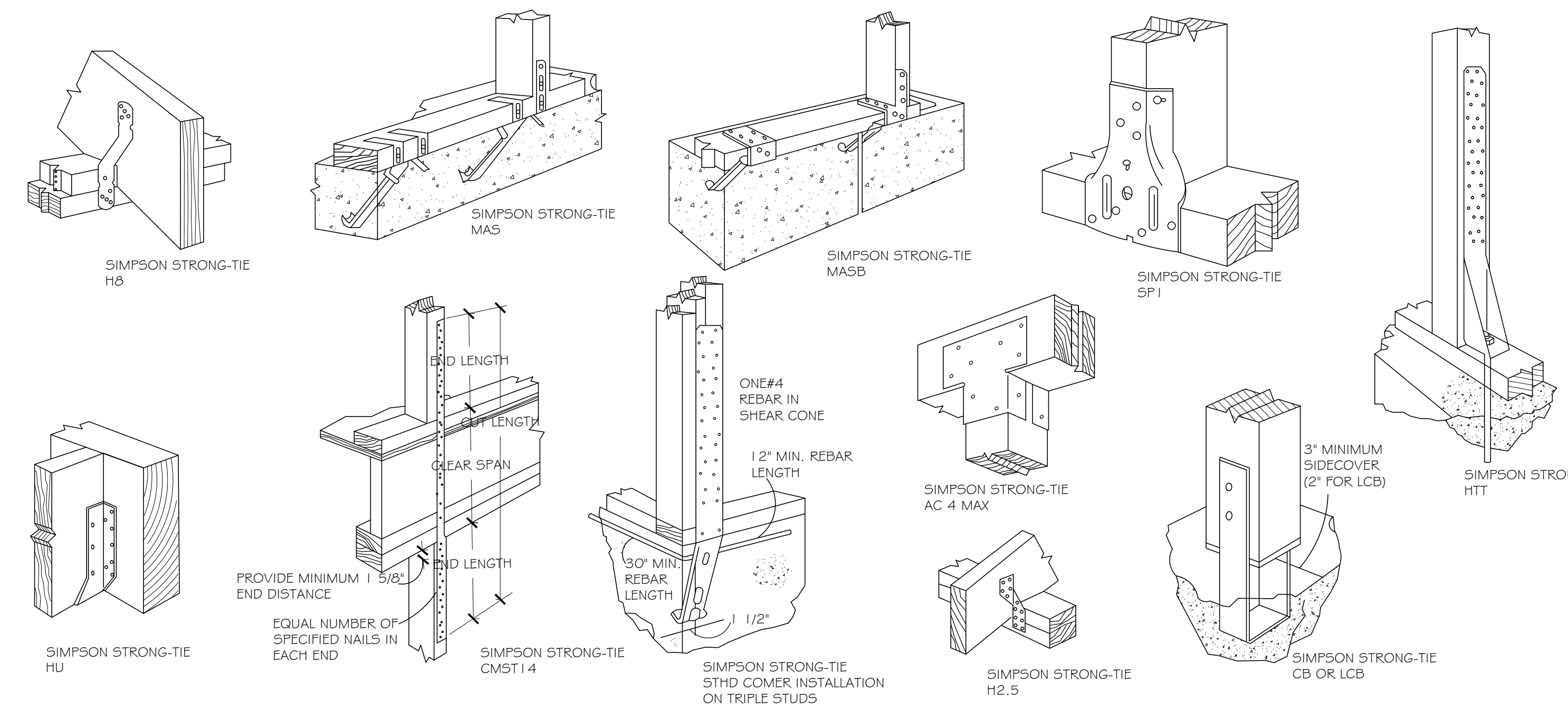
- STUD WALLS 12' OR HIGHER SHALL HAVE 2X6 OR (2) 2X4 S STUDS @ 16" ON CENTER. WALLS SUPPORTING TWO FULL FLOOR ABOVE SHALL BE 2X6, (2) 2X4 OR 4X4 STUDS AT 16" O.C.
- ALL WALL STUDS ARE STUD GRADE #2 S.Y.P. @16" O.C., BLOCKING AT MID SPANS GREATER THAN 9'. ALL STUD WALLS SHALL BE DIAGONALLY BRACED WITH 1X4 LET-IN, METAL STRAP OR STRUCTURAL PANEL AT EACH END AND AT 25' MAX. SPACING BETWEEN WALL ENDS. ALL FIRST FLOOR MUD SILLS SHALL BE TREATED LUMBER.

2 STUD WALL ELEVATION
SCALE: N.T.S.



3 TYP. SHEATHING
SCALE: N.T.S.

1 CEILING JOIST PLAN
SCALE: 1/4"=1'-0"



4 TYP. ANCHORAGE AND STRAPPING DETAILS
SCALE: N.T.S.

FRAMING CONDITION	CONNECTION
HEADER / JAMB (OPENING ≤ 6'-0")	(1)- SIMPSON HTS20 & (1) - SIMPSON HGA10 TOP & (1) SIMPSON L50 BOTT.
HEADER / JAMB (OPENING ≤ 15'-0")	(2)- SIMPSON HTS20 & (1)- SIMPSON HGA10 TOP & (1)- SIMPSON L70 BOTT.
SILL / JAMB (OPENING ≤ 6'-0")	(1)- SIMPSON L70
SILL / JAMB (OPENING ≤ 15'-0")	(1)- SIMPSON HGA10
CRIPPLE STUD / HEADER	(1)- SIMPSON SP2 & (1)- SIMPSON L50
CRIPPLE STUD / SILL PLATE	(1)- SIMPSON L50
CRIPPLE STUD / SOLE PLATE	(1)- SIMPSON L50
CRIPPLE STUD / DBL. TOP PLATE	(2)- SIMPSON RSP4 & (1)- SIMPSON L50
JAMB / FOUNDATION	SEE PLAN
JAMB/ DBL. TOP PLATE (OPENING ≤ 6'-0")	(1)- SIMPSON HDBA W/ 7/8" Ø THRU BOLT & WASHER
JAMB/ DBL. TOP PLATE (OPENING ≤ 15'-0")	(1)- SIMPSON HDU4-SDS2.5 W/ 5/8" Ø THRU BOLT & WASHER
TYP. STUD / DBL. TOP PLATE	SEE SECTIONS ON SHEET S5
TYP. STUD / SOLE PLATE	(2)- SIMPSON RSP4 & (1)- SIMPSON A23

ISSUE LOG

DATE	DESCRIPTION
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PROJECT NO:
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DATE OF ISSUE:
SHEET No.

MECHANICAL PLAN

SHEET No.

M1.0

TEMPERATURE CONTROL SECTION 1204, 2015 IBC
INTERIOR SPACES INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH ACTIVE OR PASSIVE SPACE-HEATING SYSTEMS CAPABLE OF MAINTAINING A MINIMUM INDOOR TEMPERATURE OF 68 DEGREES F AT A POINT 3 FEET ABOVE THE FLOOR ON THE DESIGN HEATING DAY.

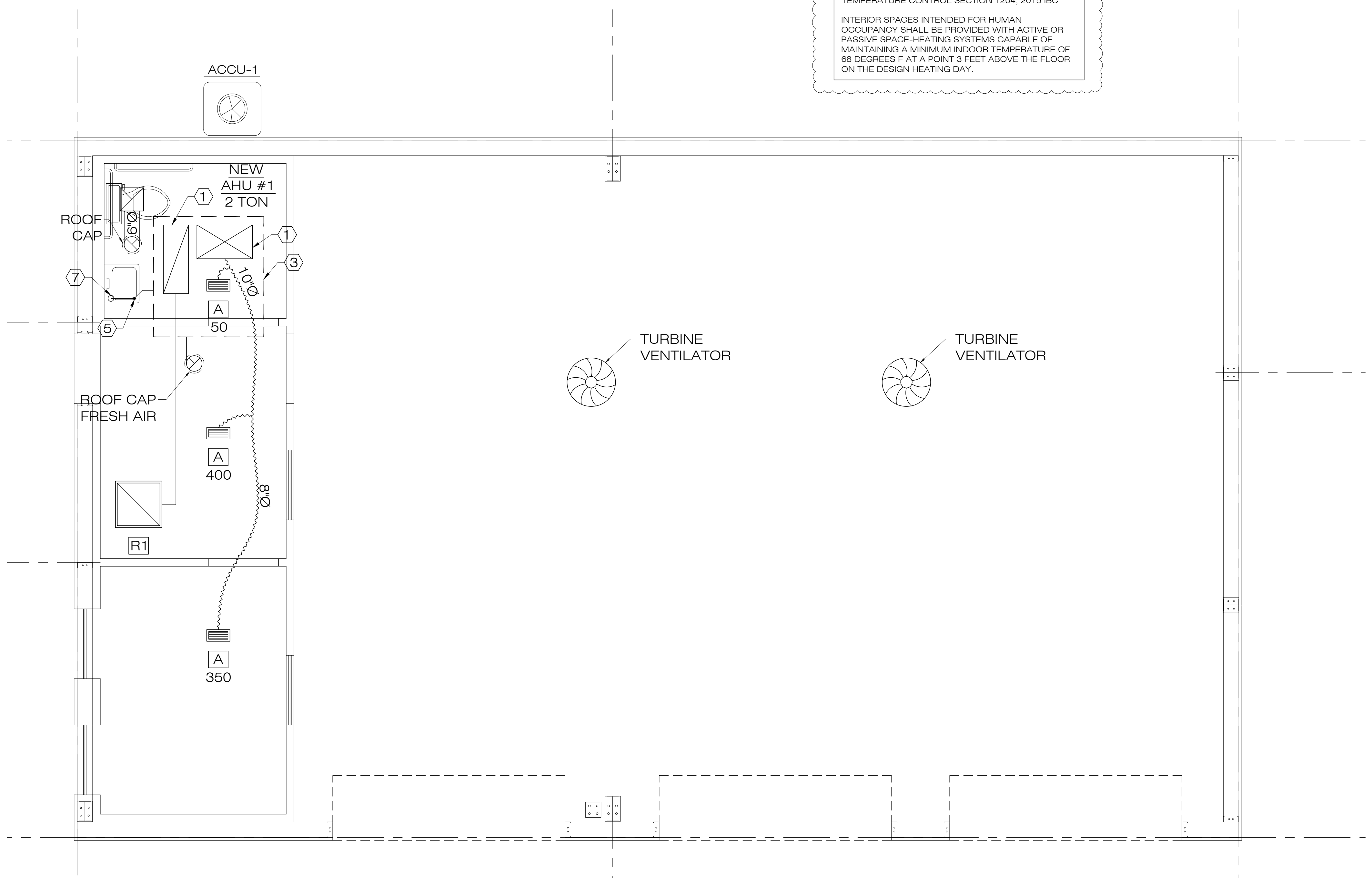
THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND WERE MADE FROM THE BEST INFORMATION AVAILABLE. CONFIRM ALL EXISTING LOCATIONS, DIMENSIONS, ELECTRICAL SERVICE, VOLTAGE, A/C UNITS, DUCTS, PIPE AND PLUMBING FIXTURES BEFORE START OR PURCHASE ANY EQUIPMENT. VISIT THE SITE PRIOR TO START WORK OR BID. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONDITIONS AS THEY EXIST AND NO ADDITIONAL COST WILL BE ALLOWED FOR READILY OBSERVABLE CONDITIONS.

- ① TRANSITION IN VERTICAL DUCT RISER TO UNIT CONNECTION SIZE.
- ② NOT IN USE.
- ③ AIR HANDLER UNITS FURNISHED BY OWNER AND INSTALLED BY MECHANICAL CONTRACTOR. SMOKE DETECTORS ARE FACTORY INSTALLED AND WIRED FOR SHUTDOWN BY THE AHU MANUFACTURER.
- ④ LOCATE ZONE TEMPERATURE CONTROLLER FOR ALL UNITS ON WALL.
- ⑤ CONDENSATE DRAIN LINE DROP FORM ROOF TO CEILING SPACE. PROVIDE 6"X6" PITCH PAN AT ROOF PENETRATION AND SEAL PROPERTY.
- ⑥ CONDENSATE PIPING IN CEILING SPACE. DRAIN LINE SHALL SLOPE A MINIMUM OF 1/8" PER LINEAR FOOT OF HORIZONTAL RUN. ROUTE CONDENSATE DRAIN LINE TO LAVATORY. INSULATE DRAIN LINE INSIDE BUILDING WITH 1/2" THICK ARMAFLEX PIPE INSULATION.
- ⑦ 3/4" CONDENSATE DRAIN LINE DOWN TO LAVATORY. PROPERLY SUPPORT PIPING AGAINST WALL WITH HYDRASORB PIPE CLAMPS.

2 KEY NOTES
SCALE: N.T.S.

- 6' X 12' CEILING SUPPLY AIR DIFFUSER
- 24' X 24' CEILING RETURN AIR
- DIFFUSER LEGEND
CFM VOLUME
- FLEXIBLE DUCT & DIAMETER
- 16/18
RECTANGLE MAIN DUCT & DIAMETER
- BATHROOM EXHAUST FAN
- AIR HANDLER UNIT
- THERMOSTAT INSTALLED 5'-0" ABOVE FINISH FLOOR WITH LOCKED PLASTIC COVER.
- AIR CONDITIONING COMPRESSOR UNIT
- TURBINE VENTILATOR

3 LEGEND
SCALE: 1/4"=1'-0"



1 MECHANICAL PLAN
SCALE: 3/8"=1'-0"

EXHAUST FAN SCHEDULE										
MARK	SERVICE	WEIGHT (LBS)	CFM	SP	RPM	HP/WATTS	VOLTAGE	DRIVE TYPE	MANUFACTURER & MODEL NO.	NOTES
B	GENERAL EXHAUST	20	50	0.35	762	80 W	115/1/60	DIRECT	GREENHECK G-121-A	1,2,3,4

NOTES:

- PROVIDE 12" HIGH INSULATED ROOF CURB, NEMA 1 DISCONNECT, AND BACKFLOW DAMPER.
- EXHAUST FANS SHALL RUN CONTINUOUSLY.
- PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION.
- PROVIDE FAN SPEED CONTROLLER.

AIR DEVICES SCHEDULE					
MARK	NECK SIZE	FACE SIZE	TYPE	DAMPER	NOTES
A	6"Ø, 6"Ø, 12"Ø	6X12	SUPPLY DIFFUSER	NONE	1,3
B	12X12	14X14	EXHAUST GRILLE	NONE	1,3
R1	22X22	24X24	RETURN AIR GRILLE	NONE	1,3,4

NOTES:

- ALL DEVICES SHALL BE WHITE FINISH.
- PROVIDE FOAM GASKET FOR ALL SURFACE MOUNTED AIR DEVICES.
- ACCEPTABLE MANUFACTURERS: TITUS, METALAIR, AND KRUEGER.
- PROVIDE 1" PLEATED FILTER.
- PROVIDE OPPOSED BLADE VOLUME DAMPER THAT IS ADJUSTABLE FROM FACE SIDE OF DIFFUSER.

AIR HANDLER UNIT SCHEDULE												
TAG NO.	UNIT SIZE	CFM SIZE	INDOOR UNIT			OUTDOOR UNIT			ELECTRIC VOLT/Ø/HZ/HP	SEER/EER	REFRIGERANT	
			MODEL #	CAPACITY (BTUH)	WEIGHT (LBS)	MODEL #	WEIGHT (LBS)	MCA				MOCP
AHU-1/ACU-1	2 TON	800	CARRIER 40RUQ07-25	24,000	198	CARRIER 40RUQ07-25	600	21.0	35	208/3/60/2.4	16.0/11.0	R-410A

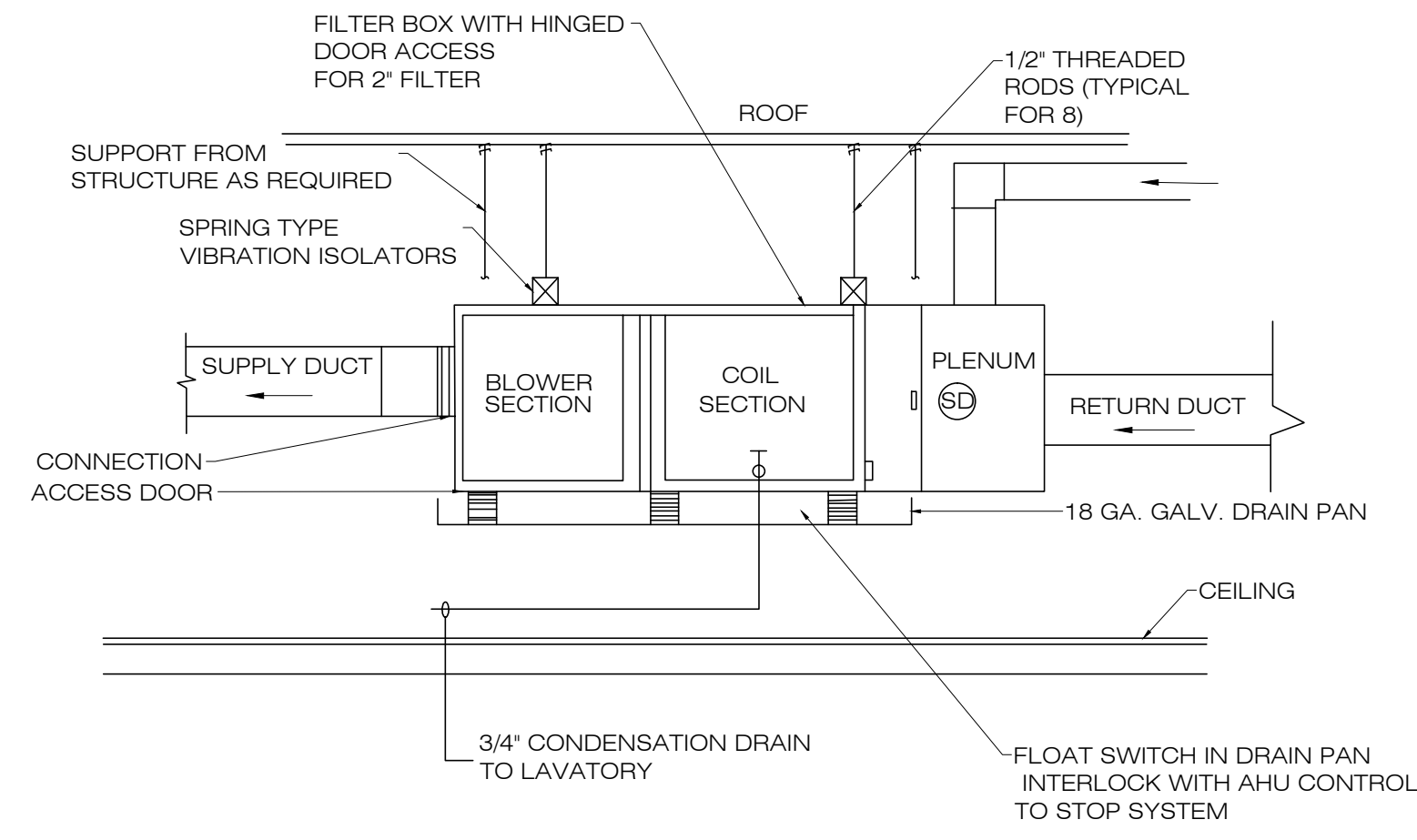
NOTES:

- UNIT SELECTION BASED ON CARRIER, EQUAL BY LENNOX, TRANE, AND GOODMAN.
- ALL REMOTE CONDENSING UNIT SHALL BE SECURED.
- ALL REFRIGERANT PIPING SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- AIR CONDITIONS UNITS ACC-1 AND AHU-1 SHALL BE OF THE SAME MANUFACTURER.
- PROVIDE WITH FACTORY REMOTE TEMPERATURE SENSOR WITH PLASTIC LOCKING COVER.
- PROVIDE WITH FACTORY 7-DAY PROGRAMMABLE THERMOSTAT WITH AUTO-CHANGEOVER.
- OUTSIDE AIR INTAKE SETTING WITH A MINIMUM OPENING FOR 2500 CFM AIR VOLUME.
- INSTALL A WATER LEVEL SENSING DEVICE.
- AUTOMATIC SHUT OFF SMOKE DETECTORS.

OUTSIDE AIR CALCULATIONS	
Office:	
$V_{bz} = (R_p \times P_z) + (R_a \times A_z)$	
$= (10 \times 5) + (1500 \times 0.06)$	
$= (50) + (90)$	
$= (140)$	
Where $E_z = 1$, therefore $V_{ot} = V_{bz}/E_z = 140$ cfm (OA Required)	
OA supplied thru A/C Unit: 140 Cfm > 200 Cfm (Required)	

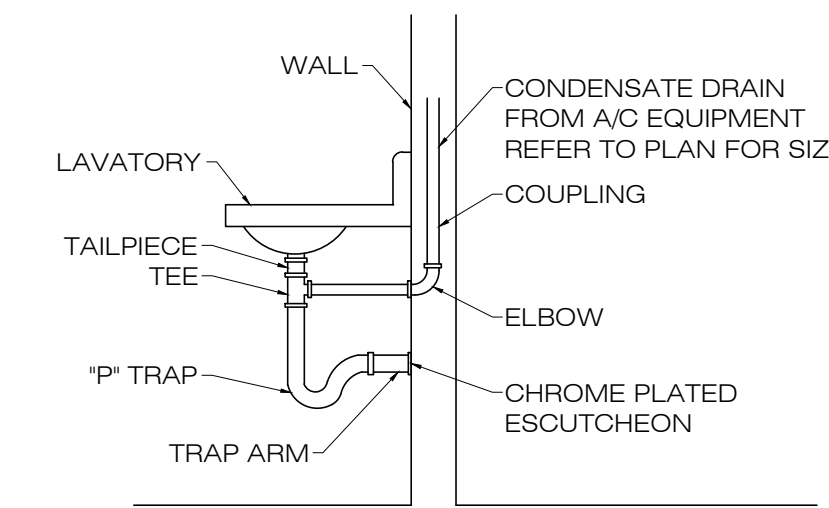
2 OUTSIDE AIR CALCULATION

SCALE: N.T.S.



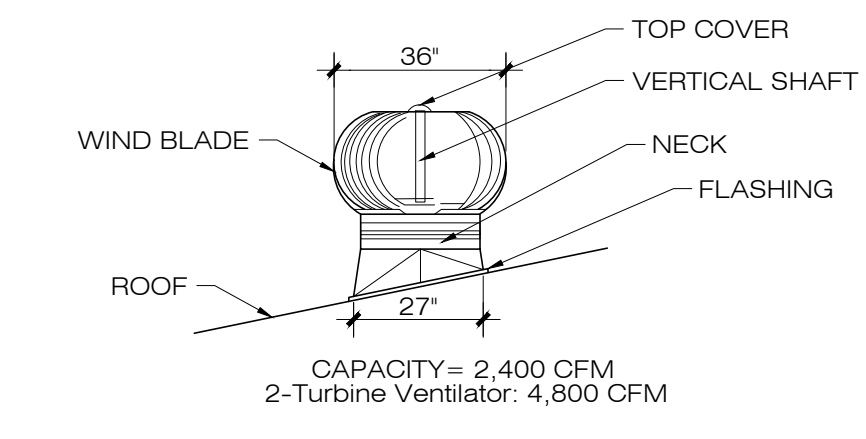
3 AIR HANDLER DETAIL

SCALE: N.T.S.



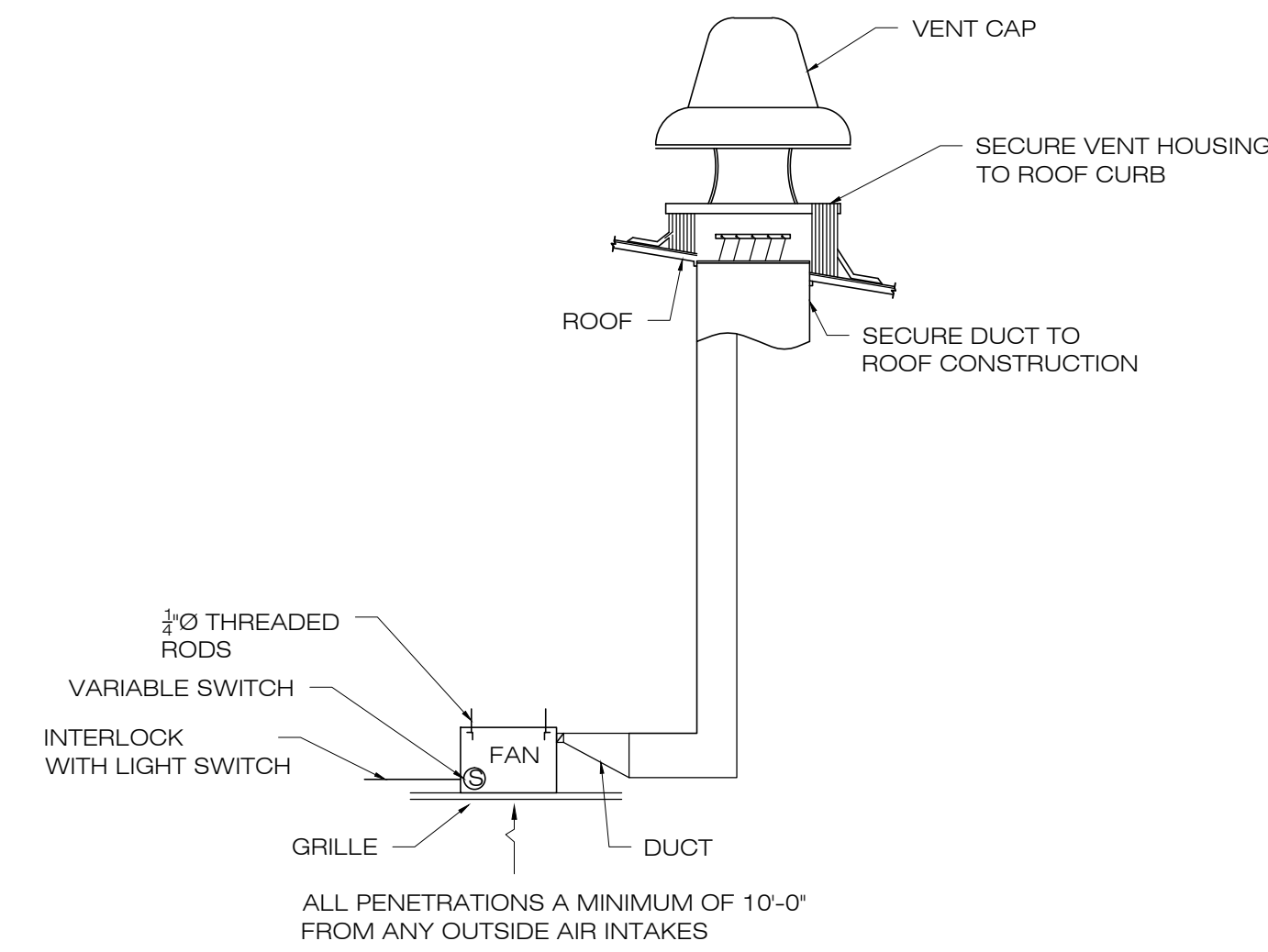
4 CD INTO LAV TAIL PIECE DETAIL

SCALE: N.T.S.



5 TURBINE VENTILATOR

SCALE: N.T.S.



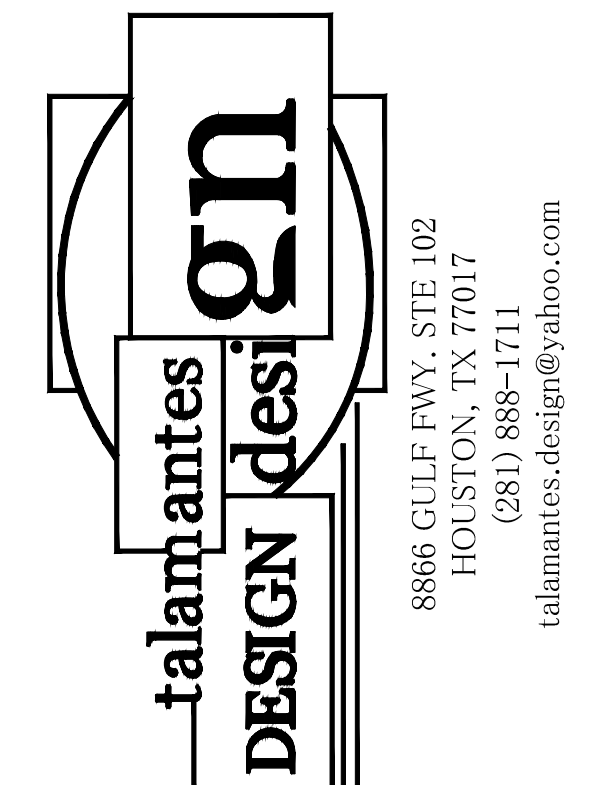
6 EXHAUST FAN DETAIL

SCALE: N.T.S.

- A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
- B. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISES AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY DESIGNER/OWNER OF ANY DISCREPANCIES BEFORE STARTING WORK.
- C. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- D. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- E. ALL PIPE, DUCT, AND EQUIPMENT HANGERS AND SUPPORTS SHALL BE PER THE LOCAL CODE.
- F. COORDINATE WITH ELECTRICAL CONTRACTOR WITH ELECTRICAL REQUIREMENTS OF APPROVED EQUIPMENT IN SUFFICIENT TIME TO ORDER PANEL BOARDS, DISCONNECTS, ECT.
- G. INSTALL THERMOSTAT AT 48" AFF. THERMOSTAT SHALL BE 7-DAY PROGRAMMABLE TYPE WITH AUTO-CHANGEOVER.
- H. GENERAL CONTRACTOR SHALL NOT MAKE ANY ROOF OR WALL PENETRATIONS WITHOUT LANDLORD'S APPROVAL.
- I. FACTORY PROVIDED INTERNAL RETURN AIR SMOKE DETECTOR INTERLOCKED TO SHUT DOWN UNIT UPON DETECTION OF SMOKE.
- J. INSTALL FURNISHED CEILING MOUNTED EXHAUST FAN. TRANSITION FROM FAN DISCHARGE TO DUCT SIZE SHOWN AND EXTEND UP THROUGH ROOF. PROVIDE A ROOF JACK, STORM COLLAR, AND ALL-WEATHER CAP.
- K. DO NOT FABRICATE ANY DUCTWORK FROM THESE. CONFIRM ALL DIMENSIONS AND AVAILABLE SPACE IN FIELD. DIMENSIONS GIVEN ON DRAWINGS ARE INSIDE FREE AREA. SHEET METAL IS LARGER ON LINED DUCT. BALANCING DAMPERS IN ALL SUPPLY AND EXHAUST BRANCH TAKEOFFS TO HAVE 45 DEGREE ENTRY FITTING WITH VOLUME DAMPER. ELBOWS TO BE RADIUS TYPE WITH MINIMUM RADIUS 1.5 TIMES OR MITERED ELBOWS WITH SINGLE THICKNESS TURNING VANES.
- SHEET METAL USE GALVANIZED SHEETMETAL, CONFORMING TO CURRENT SMACNA FOR CONSTRUCTION, REINFORCING, SUPPORT AND OTHER ASPECTS.
- RECTANGULAR SUPPLY SHOULD BE UNLINED, EXTERNALLY INSULATED, EXCEPT THAT 25 FT CLOSEST TO FAN OR AIR UNITS SHALL BE INTERNALLY LINED.
- ROUND SUPPLY SHOULD BE UNLINED, EXTERNALLY INSULATED.
- EXHAUST FAN SHOULD HAVE NO LINER, NO INSULATION.
- FLEX DUCT SHALL BE INSULATED R-6 AND SHALL NOT EXCEED 8 FT IN LENGTH NOR TO BE BENT MORE THAN 90 DEGREES. FLEX DUCT TO BE EXTERNALLY INSULATED. FLEX DUCT IS SAME SIZE AS DIFFUSER NECK.
- RIGID DUCT BOARD WITH R-6 INSULATION WITH 1-1/2" THICKNESS FIBERGLASS INSULATION WITH FOIL VAPOR BARRIER. ALL JOINTS AND SEAMS SEALED IN MANNER TO PROVIDE A COMPLETE VAPOR TIGHT ENVELOURE.
- L. EACH SYSTEM SHALL MEET THE MINIMUM EFFICIENCY REQUIREMENTS PER THE CURRENT ENERGY CONSERVATION CODE.
- M. CONDENSATE SHALL BE DISCHARGED TO AN APPROVED PLUMBING FIXTURE.
- N. WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION SHALL BE PROVIDED TO THE BUILDING OWNER OR A DESIGNATE REPRESENTATIVE. RECORD DRAWINGS SHALL INCLUDE A MINIMUM THE LOCATION AND PERFORMANCE DATA ON EACH PIECE OF EQUIPMENT, GENERAL CONFIGURATION OF THE DUCT AND PIPE DISTRIBUTION SYSTEM, INCLUDING SIZES, AND THE TERMINAL AIR OR WATER DESIGN FLOW RATES. ALSO TO BE PROVIDED WITHIN 90 DAYS ARE OPERATING AND MAINTENANCE MANUALS INCLUDING AT A MINIMUM SUBMITTAL DATA STATING EQUIPMENT SIZE AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, OPERATION MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED. ALSO INCLUDED SHALL BE NAMES AND ADDRESSES OF AT LEAST ONE SERVICE AGENCY, HVAC CONTROLS SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, 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. ALSO TO BE INCLUDED IS A COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING SUGGESTED SET POINTS.

1 MECHANICAL NOTES

SCALE: N.T.S.



CONSULTANT

OWNER

NEW OFFICE/WAREHOUSE
6817 ROANOKE ST.
HOUSTON TX. 77028

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DATE OF ISSUE:

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MECHANICAL PLAN

SHEET No.

M1.2

8866 GULF FWY. STE 102
HOUSTON, TX 77017
(281) 888-1711
talamantes.design@yahoo.com

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ELECTRICAL NOTES

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- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, PAY ALL FEES, AND COMPLY WITH THE APPLICABLE NATIONAL, STATE & MUNICIPAL LAWS, CODES AND ORDINANCES RELATED TO BUILDING AND PUBLIC SAFETY.
- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE CONTRACTOR SHALL PROVIDE ALL PULL BOXES, JUNCTION BOXES AND INCIDENTAL MATERIALS AND LABOR FOR A COMPLETELY FULLY FUNCTIONAL SYSTEM.
- COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE RULES, REGULATIONS AND ORDINANCES OF THE LOCAL CITY OF HOUSTON, TEXAS AUTHORITY AND AS PER 2017 NATIONAL ELECTRICAL CODE, NFPA-70.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATE WITH OWNER FOR ALL CONSTRUCTION STANDARDS AND SPECIFICATIONS INCLUDING BUT NOT LIMITED TO STANDARD LIGHT FIXTURE, SWITCHES, RECEPTACLES, COVER PLATES, AND WIRING METHODS.
- THE SCOPE OF THE ELECTRICAL WORK INCLUDES FURNISHING AND INSTALLING ALL ELECTRICAL WORK FOR A COMPLETE INSTALLATION
- ELECTRICIAN SHALL BE RESPONSIBLE FOR COORDINATION OF ELECTRIC SERVICE ENTRANCE, BRANCH CIRCUIT & TELEPHONE SERVICE ENTRANCE WITH OTHER DIVISIONS AS RELATED TO THIS CONTRACT, OR THEREBY AFFECTED.
- PROVIDE 1/4" NYLON ROPE IN ALL 3/4" EMPTY CONDUITS STUB-UPS OUT ABOVE THE CEILING FOR ACCESS KEYPADS AND WIRING BY OTHERS OR AS REQUIRED BY THE UTILITIES CONCERNED. PROVIDE EASILY IDENTIFIABLE MARKERS.
- ROUTE (3) 4" EMPTY CONDUITS WITH PULL STRING TO THE OFFICE CONDUITS OUT TO THE BACK PROPERTY LINE FOR VHF, UHF ANTENNA CABLE BY OTHERS, TELEPHONE, CATV AND FUTURE USE SPARE. COORDINATE INSTALLATION AND EXACT LOCATION OF TERMINATIONS WITH THE APPROPRIATE UTILITY COMPANY AND LOCATIONS WITH THE OWNER.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATION OF ALL CEILING MOUNTED DEVICES.
- COORDINATE EXACT LOCATION OF ALL LIGHTING FIXTURES IN MECHANICAL / ELECTRICAL SPACES WITH EQUIPMENT, DUCTWORK AND PIPING.
- ALL WIRING SHALL BE COPPER. ALUMINUM WIRING IS NOT ACCEPTABLE. MINIMUM WIRE SIZE IS #12 AWG. CONDUCTOR SIZE #12 AND #10 SHALL BE SOLID W/ 3/4" CONDUIT. CONDUCTORS SIZED #8 AND LARGER SHALL BE STRANDED. INSULATION SHALL BE 'UL' TYPE THW OR THHN/THWN. UNLESS NOTED OTHERWISE FOR POWER AND LIGHTING APPLICATION.
- PROVIDE MULTI-CONDUCTOR HOMERUNS WITH #10 NEUTRAL AND MAXIMUM 3 CIRCUIT PER HOMERUN.
- ALL RECEPTACLES SWITCHES, TELEPHONE, OUTLETS, COVER PLATES ETC SHALL BE WHITE COLOR, EXCEPT I.G. RECEPTACLES AS SCHEDULED. OR OTHERWISE NOTED.
- ALL GROUNDING TYPE OUTLETS AND RECEPTACLES SHALL BE GROUNDED WITH A SEPARATE GREEN INSULATED CONDUCTOR FROM GROUND LUGS IN RESPECTIVE PANEL. SIZE OF GROUNDING CONDUCTOR SHALL BE IN ACCORDANCE WITH THE NEC.
- EACH CONDUIT SHALL BE LIMITED TO (3) CIRCUITS MAXIMUM.
- WHEN APPLICABLE, FURNISH ACCESS DOORS FOR INSTALLATION BY THE GENERAL CONTRACTOR IN WALLS AND CEILINGS WHERE ACCESS IS REQUIRED TO CONCEALED ELECTRICAL BOXES AND DEVICES.
- CONTRACTOR SHALL VERIFY AND COORDINATE WITH HVAC CONTRACTOR TO DETERMINE INSTALLATION REQUIREMENTS IF ALTERNATE RTUS ARE TO BE PROVIDED.
- IF BRANCH PANELS ARE SERIES RATED, OVERCURRENT DEVICE ENCLOSURES SHALL BE IDENTIFIED AS SERIES RATED IN ACCORDANCE WITH NEC- 110.22. THE OVERCURRENT DEVICES SHALL BE AIC RATED PER MANUFACTURERS LABELING OF THE ELECTRICAL EQUIPMENT.
- THE OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING RATING OF NOT LESS THAN 10000 AMPS RMS SYMMETRICAL, OR AS SPECIFIED OTHERWISE.
- ALL ELECTRICAL MATERIALS USED ON THIS PROJECT MUST BE U.L. LISTED AND LABELED. EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, LISTING OR LABELING REQUIREMENTS AND RESTRICTIONS.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL MOTOR STARTERS NOT PROVIDE WITH MECHANICAL OR PLUMBING EQUIPMENT.
- PROVIDE IDENTIFICATION OF ALL NEW PANEL BOARD AND DISTRIBUTION EQUIPMENT WITH ENGRAVED PHENOLIC PLASTIC LABEL SCREWED TO COVER. LABEL MUST IDENTIFY EQUIPMENT NAME, VOLTAGE AND PHASE, AMPACITY, AND SERVICE SOURCE.
- SEAL ALL PENETRATIONS THROUGH RATED WALLS, FLOOR, CEILING, ETC. PER CODE WITH UL LISTED FIRE STOP COMPOUND.
- EXPOSED CONDUIT DROPS ARE NOT ALLOWED TO PARTITIONS. ALL WIRING TO PARTITIONS SHALL BE CONCEALED.
- ALL HORIZONTAL CONDUIT RUNS ON BUILDING WALLS AND IN CEILING AREA TO BE RUN ABOVE THE BOTTOM CHORD OF ROOF TRUSS (WITHIN BAR JOIST) NO CONDUIT RUNS ON THE EXTERIOR OF BUILDING.

GFI NOTE:
 ALL 125-VOLT, SINGLE PHASE, 15 AND 20 AMP RECEPTACLES INSTALLED IN BATHROOM, KITCHENS, ROOFTOPS, OUTDOORS AND AROUND SINKS SHALL HAVE GROUND-FAULT-CIRCUIT-INTERRUPTER (GFCI) PROTECTION FOR PERSONNEL.

POWER PLAN CIRCUITING NOTES:

- THE POWER PLANS INDICATE BRANCH CIRCUITS FOR ALL RECEPTACLES. INSTALL BRANCH CIRCUIT WIRING IN RACEWAYS, AS REQUIRED TO PROVIDE CIRCUITING AS SHOWN ON THE DRAWINGS.
- BRANCH CIRCUIT HOMERUNS SHALL BE LIMITED TO THREE PHASE CONDUCTORS (ON DIFFERENT PHASES). ONE NEUTRAL CONDUCTOR AND ONE EQUIPMENT GROUND CONDUCTOR INSTALLED IN CONDUIT. ISOLATED GROUND CIRCUITS SHOULD CONTAIN AN ADDITIONAL ' ISOLATED GROUNDING CONDUCTOR '.
- WHERE ALLOWED BY THE LOCAL AUTHORITY HAVING JURISDICTION, ARMORED CABLE (BX) MAY BE USED FOR DROP IN PARTITIONS TO RECEPTACLES AND FOR SINGLE CIRCUIT BRANCH CIRCUIT WIRING FROM RECEPTACLE TO RECEPTACLE. ARMORED CABLE (BX) SHALL NOT BE USED FOR BRANCH CIRCUIT HOMERUNS. ARMORED CABLE (BX) SHALL NOT BE USED WHERE THAN THREE CONDUCTORS (PHASE / NEUTRAL / GROUND) ARE REQUIRED, WERE EXPOSED, OR IN LENGTHS EXCEEDING 20 FEET.
- MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4" MIN. SIZE FLEX CONDUIT WAY BE 1/2" MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1" C. DO NOT COMBINE CONDUIT FOR DATA.
- ALL RECEPTACLES TO BE MOUNTED A MINIMUM OF 16" A.F.F. AND ALL SWITCHES SHALL BE A MAXIMUM OF 48" A.F.F UNLESS NOTED OTHERWISE. NEW DEVICE TYPES SHALL MATCH ORIGINAL BASE BUILDING STANDARDS WITH COLOR SELECTION BY OWNER. UNLESS OTHERWISE NOTED
- JUNCTION BOX AND CIRCUIT TO THE HOOD SYSTEM COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH MFG.
- WHETHER SHOWN ON THE FLOOR PLANS OR NOT, PROVIDE WEATHERPROOF GFI DUPLEX RECEPTACLES ON ROOF SUCH THAT A RECEPTACLE IS LOCATED WITHIN 25' FT. OF EACH ITEM OF MECHANICAL VENTILATION, AIR CONDITIONING, REFRIGERATION AND HEATING EQUIPMENT INCLUDING EXHAUST FANS, CONNECT UP TO FOUR RECEPTACLES TO EACH DEDICATED 20 / 1 CIRCUIT BREAKER IN THE NEAREST 120 / 208V PANELBOARD.
- IT IS CONTRACTORS RESPONSIBILITY TO HAVE VERIFIED EXISTING JOB-SITE CONDITIONS DURING OF ELECTRICAL WORK INVOLVED AS A RESULT OF ARCHITECTURAL MODIFICATIONS TO THE EXISTING STRUCTURE. THE SCOPE OF THE WORK SHALL INCLUDE MATERIALS AND OUTLETS CONSISTING OF FIXTURES, DEVICES, EQUIPMENT OR PERMANENTLY, OR WHICH MUST BE PROVIDED, SO THAT THE INDICATED REMODELING MAY BE ACCOMPLISHED. NOT ALL EXISTING OUTLETS ARE NECESSARILY INDICATED ON THE DRAWINGS.
- VERIFY THE LOADING OF EACH CIRCUIT AFFECTED BY REMODELING WORK. THE MAXIMUM LOAD OF ANY BRANCH CIRCUIT MUST NOT EXCEED 80% OF ITS RATING.
- WHEN LOCATING SYSTEMS NEXT TO DOORS, LOCATE 8 INCHES OFF DOOR JAMB TO CENTER OF DEVICE. WHEN MULTIPLE DEVICES ARE TOGETHER, STACK BUT NO MORE THAN 72 INCHES AFF.
- ON CIRCUITS GREATER THAN 20A, FEEDING MULTIPLE PIECES OF EQUIPMENT, PROVIDE FUSED DISCONNECTS (SIZED FOR EQUIPMENT PROTECTING).
- PROVIDE INDIVIDUAL DISCONNECTS FOR ALL SMOKE ARE DAMPERS AND VAVS. NO EXCEPTIONS.
- ALL CONDUIT AND/OR CABLING SHALL BE INSTALLED BETWEEN THE BOTTOM AND TOP CHORD OF JOIST. WHERE NO CEILINGS ARE SCHEDULED, ALL CONDUIT SHALL BE UP AGAINST BOTTOM OF THE TOP CHORD.
- COORDINATE CONDUIT ROOF PENETRATIONS WITH MECHANICAL ROOF TOP UNITS AND/OR THRU HOODED PLUMBING PENETRATIONS TO CONDENSING UNITS.
- ALL COMPUTER POWER OUTLETS TO BE ISOLATED GROUND WITH #10 AWG NEUTRAL. DIFFERENT CIRCUITS SHALL NOT SHARE A COMMON NEUTRAL.
- PROVIDE INDIVIDUAL DISCONNECTS FOR ALL SMOKE ARE DAMPERS AND VAVS. NO EXCEPTIONS.
- CONTRACTOR TO PROVIDE CONNECTION FROM EXHAUST FANS TO ALL MOTORIZED BACKDRAFT DAMPERS AS REQUIRED, COORDINATE WITH MECHANICAL.
- REFER TO MECHANICAL, FIRE ALARM AND FIRE PROTECTION DRAWINGS FOR LOCATION OF EQUIPMENT REQUIRING ELECTRICAL CONNECTION.

2 POWER NOTES
 SCALE: N.T.S.

THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND WERE MADE FROM THE BEST INFORMATION AVAILABLE. CONFIRM ALL EXISTING LOCATIONS, DIMENSIONS, ELECTRICAL SERVICE, VOLTAGE, A/C UNITS, DUCTS, PIPE AND PLUMBING FIXTURES BEFORE START OR PURCHASE ANY EQUIPMENT. VISIT THE SITE PRIOR TO START WORK OR BID. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONDITIONS AS THEY EXIST AND NO ADDITIONAL COST WILL BE ALLOWED FOR READILY OBSERVABLE CONDITIONS.

LIGHTING FIXTURE CIRCUITING NOTES:

- BRANCH CIRCUIT HOMERUNS SHALL BE LIMITED TO THREE PHASE CONDUCTORS (ON DIFFERENT PHASES). ONE NEUTRAL CONDUCTOR AND ONE EQUIPMENT GROUND CONDUCTOR INSTALLED IN CONDUIT.
- WHERE ALLOWED BY THE LOCAL AUTHORITY HAVING JURISDICTIONS, ARMORED CABLE (BX) MAY BE USED FOR LAY-IN FIXTURE PIGTAILS AND SWITCH LEG DROPS. ARMORED CABLE (BX) SHALL NOT BE USED FOR BRANCH CIRCUIT HOMERUNS. ARMORED CABLE (BX) SHALL NOT BE USED WHERE MORE THAN THREE CONDUCTORS (PHASE / NEUTRAL / GROUND) ARE REQUIRED. WHERE EXPOSED, OR IN LENGTHS EXCEEDING 20 FEET.
- EXHAUST TO BE SWITCHED WITH ROOM LIGHTS VIA OCCUPANCY SENSOR.
- ALL LIGHTS ARE TO BE CONTROLLED BY THE ENERGY MANAGEMENT CONTROL SYSTEM. THIS CONTROL SYSTEM AS SPECIFIED. THE CONTRACTOR SHALL PROVIDE ALL MECHANICALLY HELD LIGHTING CONTRACTORS, REMOTE CONTROL RELAYS, AND WIRING TO EMCS.
- ALL EXIT LIGHTS AND EMERGENCY LIGHTS WITH EMERGENCY BACKUP BATTERIES SHALL HAVE THEIR NORMAL BRANCH CIRCUIT WIRING TIED INTO THE LOCAL CIRCUIT IN THE AREA FOR WHICH THEY SERVE AHEAD OF ALL SWITCHING IN ACCORDANCE WITH ARTICLE 700 OF NEC.
- VERIFY THE LOADING OF EACH CIRCUIT AFFECTED BY REMODELING WORK. THE MAXIMUM LOAD OF ANY BRANCH CIRCUIT MUST NOT EXCEED 80% OF ITS RATING.
- ALL EXISTING LIGHT FIXTURES, TO BE RELOCATED, MUST BE CLEANED, RELAMPED AS REQUIRED, AND TOUCHED UP WITH PAINT, AND ALL DAMAGED PARTS REPLACED. THE FIXTURES SHALL THEN BE REINSTALLED AS REQUIRED. PROVIDE NEW BALLAST AS REQUIRED.
- ALL 2x4' OR 2x2' FLUORESCENT LIGHT FIXTURES UNLESS NOTED OTHERWISE.
- PROVIDE BATTERY BACKUP BALLASTS FOR ALL EMERGENCY FLUORESCENT FIXTURES. TYPICAL UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL VERIFY FINAL LOCATION OF FLUORESCENT FIXTURES WITH MECHANICAL AND PLUMBING TRADES (TYPICAL).
- REFER TO THE MECHANICAL EXHAUST FAN SCHEDULED FOR EXHAUST FAN CONTROL, UNLESS OTHERWISE NOTED.
- REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT.
- WHERE THE CEILING IS MORE THAN THREE FEET BELOW THE BOTTOM CHORD OF THE JOIST, ALL CONDUIT AND CABLING SHALL BE INSTALLED ON A TRAPEZE SUPPORT AS SHOWN ON THE DETAILS. WHERE THE CEILING IS LESS THAN THREE FEET BELOW THE BOTTOM CHORD, ALL CONDUIT AND CABLING SHALL BE INSTALLED ABOVE THE BOTTOM CHORD OF THE JOIST. WHERE NO CEILING IS SCHEDULED, ALL CONDUIT AND CABLING SHALL BE INSTALLED UP AGAINST THE BOTTOM OF THE DECK.
- HEIGHT OF ALL SWITCHES, PULLS, AND CONTROLS SHALL BE ACCESSIBLE PER A.D.A., MAXIMUM 48" AFF.
- ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.

1 LIGHTING NOTES
 SCALE: N.T.S.

NOTES:
 1. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL STRUCTURAL SUPPORTS, BRACING AND UNISTRUT (HOT DIPPED GALVANIZED) NECESSARY TO ATTACH PANELS, METERS, WEATHER HEAD AND EQUIPMENT TO BUILDING WALL. ALL SUCH STRUCTURAL SHALL BE LOCATED AS REQUIRED ON BUILDING.
 2. ALL ELECTRICAL EQUIPMENT CABINETS TO HAVE SAFETY EARTH ELECTRODE SYSTEM GROUND WITH 2AL-CU RATED CLAMPS OR CADWELDED CONNECTIONS. ALL ELECTRICAL EQUIPMENT CABINETS TO BE GROUNDED TOGETHER.
 3. ELECTRICAL CONTRACTOR SHALL PAINT ALL STRUCTURAL SUPPORTS, BRACING AND UNISTRUT AND ALL ELECTRICAL DEVICES PANELS, METERS, WEATHER HEAD AND EQUIPMENT COLOR TO MATCH BUILDING COLOR. VERIFY WITH ARCHITECT.
 4. ELECTRICAL CONTRACTOR COORDINATE ROUTING OF ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO CONSTRUCTION.
 5. CONTRACTOR SHALL USE FACTORY-PROVIDED ITEMS WHEREVER POSSIBLE. FABRICATED ITEMS SHALL NOT BE USED UNLESS APPROVED PRIOR TO INSTALLATION BY THE ENGINEER/ARCHITECT.

VERIFY EXACT REQUIREMENTS FOR ELECTRICAL EQUIPMENT WITH OWNER FOR THIS PROJECT. IN THE CASE OF A DISCREPANCY BETWEEN THE ACTUAL SELECTION OF EQUIPMENT AND THESE DRAWINGS, ADVISE THE OWNER BEFORE WORK BEGINS. FIELD VERIFY ROUGH IN LOCATIONS FOR ALL LIGHTS AND EQUIPMENT BEFORE INSTALLATION. ELECTRICAL CONTRACTOR TO COORDINATE WITH EQUIPMENT VENDOR AND DRAWINGS SUPPLIED BY FOOD SERVICE DESIGN FOR ADDITIONAL REQUIREMENT.
 CONTROLS: PROVIDE ALL CONTROL WIRING AND CONTROL CIRCUITS TO RENDER ALL HVAC EQUIPMENT INSTALLATIONS COMPLETE AND OPERABLE. ALL CONTROL WIRING SHALL BE PERFORMERS IN ACCORDANCE WITH CONTROL WIRING DIAGRAMS FURNISHED BY THE MECHANICAL CONTRACTOR.
 PANEL SCHEDULE IS PROVIDED TO FULFILL PERMIT INFORMATION REQUIREMENTS. CONTRACTOR SHALL NOTE THAT CIRCUIT NUMBERS ARE ARBITRARY ASSIGNMENTS. CONTRACTOR SHALL VISIT JOB SITE AND FIELD VERIFY ACTUAL CIRCUIT NUMBERS AND AVAILABILITY. ALSO HE SHALL PROVIDE FINAL 'RECORD DRAWINGS' SCHEDULE TO THE OWNER UPON DATE PANEL SCHEDULE (SHOWING ALL CIRCUITS, THEIR USAGE AND ASSIGNMENTS) UPON FINAL JOB COMPLETION AND PRIOR TO FINAL ACCEPTANCE.

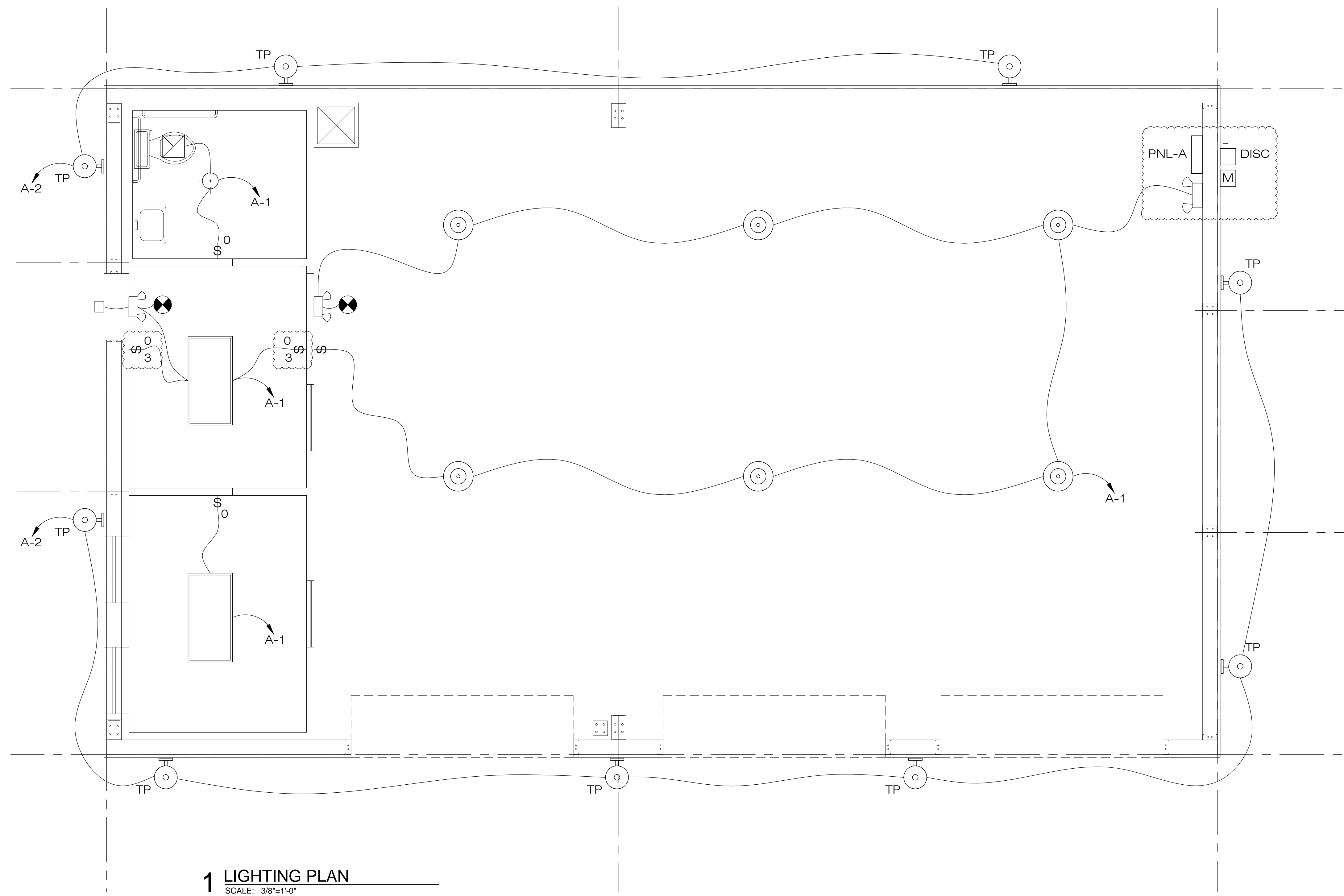
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ELECTRICAL PLAN

SHEET No.

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THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND WERE MADE FROM THE BEST INFORMATION AVAILABLE. CONFIRM ALL EXISTING LOCATIONS, DIMENSIONS, ELECTRICAL SERVICE, VOLTAGE, A/C UNITS, DUCTS, PIPE AND PLUMBING FIXTURES BEFORE START OR PURCHASE ANY EQUIPMENT. VISIT THE SITE PRIOR TO START WORK OR BID. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONDITIONS AS THEY EXIST AND NO ADDITIONAL COST WILL BE ALLOWED FOR READILY OBSERVABLE CONDITIONS.

- COOPER LIGHTING METALUX 2GR8-FCFK A-24 RW-U, 120V, 96W
- INCANDESCENT LIGHT FIXTURE 120V, 100W
- ⊕ INCANDESCENT CEILING LIGHT FIXTURE 120V, 45W
- EXTERIOR WALL PACK INCANDESCENT BULBS LIGHT FIXTURE 120V, 100W, BATTERY BACK UP 90 MIN, (TIME AND PHOTOCCELL CONTROLLED)
- ⊕ CEILING MNTD. EXIT -EMERGENCY COMBO LIGHT FIXTURE, NO ARROWS, FIXTURE W/ 90-MINUTE BATTERY PACK, LITHONIA OR EQUAL 120V, 120W, 1-100W
- ⊕ CEILING OR WALL MNTD, EMERGENCY LIGHT FIXTURE W/ 90-MINUTE BATTERY BACKUP PACK. APPROVED FOR WET LOCATION, LITHONIA OR EQUAL, 120V, 120W, 2-60W
- ⊕ NEW CEILING MNTD EXHAUST FAN, 50 CFM, FLA=0.75, 120V, 90W .
- ⊕ SINGLE POLE SWITCH
- ⊕ THREE-WAY SWITCH
- ⊕ OCCUPANCY SENSOR (WITH REMOTE CONTROL DEVICE CS 20-W AND INDICATOR PILOT LIGHT, WITH 30 MIN AUTO OFF & INTEGRATED MOVEMENT SENSOR)
- ⊕ RECEPTACLE OUTLETS, 120V.
- ⊕ (4) RECEPTACLE OUTLETS, 120V.
- ⊕ CEILING MOUNTED RECEPTACLE
- ⊕ WEATHERPROOF RECEPTACLE
- ⊕ FAULT CIRCUIT INTERRUPTER RECEPTACLE
- ⊕ 96" AFF RECEPTACLE OUTLETS, 120V.
- T/C TIME CLOCK CONTROL

1 LIGHTING PLAN
SCALE: 3/8"=1'-0"

2 LEGEND
SCALE: N.T.S

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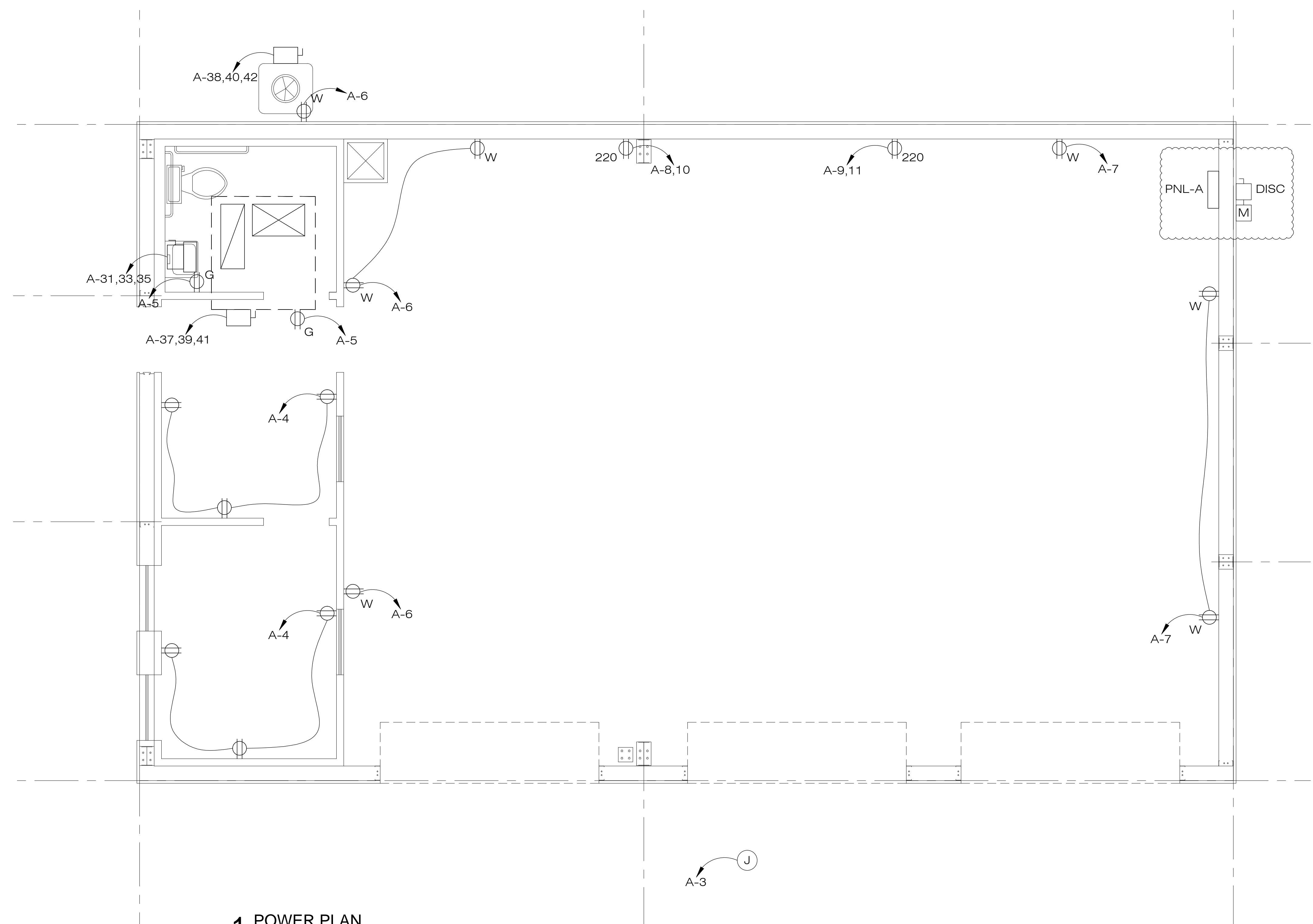
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ELECTRICAL PLAN

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THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND WERE MADE FROM THE BEST INFORMATION AVAILABLE. CONFIRM ALL EXISTING LOCATIONS, DIMENSIONS, ELECTRICAL SERVICE, VOLTAGE, A/C UNITS, DUCTS, PIPE AND PLUMBING FIXTURES BEFORE START OR PURCHASE ANY EQUIPMENT. VISIT THE SITE PRIOR TO START WORK OR BID. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONDITIONS AS THEY EXIST AND NO ADDITIONAL COST WILL BE ALLOWED FOR READILY OBSERVABLE CONDITIONS.

- ☐ COOPER LIGHTING METALUX. 2GR8-FCTK A-24 RW-U, 120V, 96W
- ⊙ INCANDESCENT LIGHT FIXTURE 120V, 100W
- ⊕ INCANDESCENT CEILING LIGHT FIXTURE 120V, 45W
- ⊙ EXTERIOR WALL PACK INCANDESCENT BULBS LIGHT FIXTURE 120V, 100W, BATTERY BACK UP 90 MIN. (TIME AND PHOTOCCELL CONTROLLED)
- ⊙ CEILING MNTD. EXIT -EMERGENCY COMBO LIGHT FIXTURE, NO ARROWS, FIXTURE W/ 90-MINUTE BATTERY PACK, LITHONIA OR EQUAL 120V, 120W, 1-100W
- ⊙ CEILING OR WALL MNTD. EMERGENCY LIGHT FIXTURE W/ 90-MINUTE BATTERY BACKUP PACK. APPROVED FOR WET LOCATION, LITHONIA OR EQUAL, 120V, 120W, 2-60W
- ⊕ NEW CEILING MNTD EXHAUST FAN, 50 CFM, FLA=0.75, 120V, 90W .
- ⊕ SINGLE POLE SWITCH
- ⊕³ THREE-WAY SWITCH
- ⊕⁰ OCCUPANCY SENSOR (WITH REMOTE CONTROL DEVICE CS 20-W AND INDICATOR PILOT LIGHT, WITH 30 MIN AUTO OFF & INTEGRATED MOVEMENT SENSOR)
- ⊕ RECEPTACLE OUTLETS, 120V.
- ⊕ (4) RECEPTACLE OUTLETS, 120V.
- ⊕^C CEILING MOUNTED RECEPTACLE
- ⊕^W WEATHERPROOF RECEPTACLE
- ⊕^S FAULT CIRCUIT INTERRUPTER RECEPTACLE
- ⊕^V 96" AFF RECEPTACLE OUTLETS, 120V.
- T/C TIME CLOCK CONTROL

1 POWER PLAN
SCALE: 3/8"=1'-0"

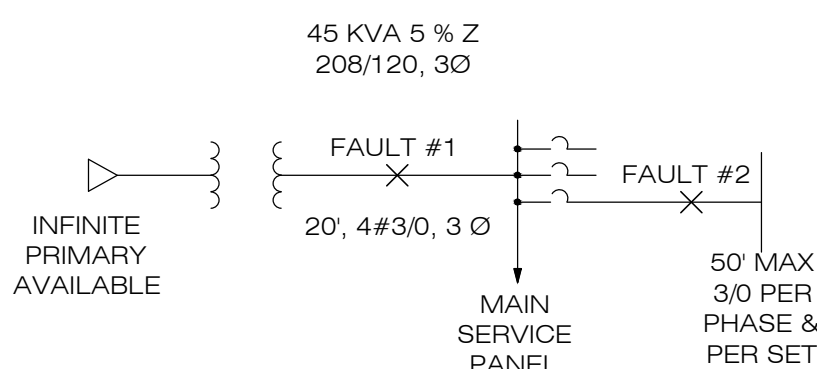
2 LEGEND
SCALE: N.T.S

PANEL "A"												
200 AMP, MCB, 208Y/120, 3PH, 4W, NEMA-1, 10 KAIC												
CKT #	LOAD SERVED	LOAD	WIRE SIZE	BKR SIZE	A	B	C	BKR SIZE	WIRE SIZE	LOAD	LOAD SERVED	CKT #
1	LIGHTING/EMG LIGHT	1027	12	20/1	A			20/1	12	900	EXTERIOR LIGHTING	2
3	BUILDING SIGN	1200	12	20/1		B		20/1	12	1080	RECEPTACLE	4
5	GFCI RECEPTACLE	360	12	20/1			C	20/1	12	720	RECEPTACLE	6
7	RECEPTACLE	540	12	20/1	A			20/2	12	180	RECEPTACLE	8
9	RECEPTACLE	180	12	20/2		B			12	180		10
11		180	12				C					12
13					A							14
15						B						16
17							C					18
19					A							20
21						B						22
23							C					24
25					A							26
27						B						28
29							C					30
31		1000	10		A							32
33	TANKLESS WATER HEATER	1000	10	30/3		B						34
35		1000	10				C					36
37		2200	8		A			10	1800			38
39	AHU	2200	8	40/3		B	30/3	10	1800	ACCU		40
41		2200	8				C	10	1800			42
		PHASE A= 7647		PHASE B= 7640		PHASE C= 6260						
		CONNECTED LOAD= 21547 /360=		60		X 1.25=		75		AMPS		

1 PANEL SCHEDULE

SCALE: N.T.S.

FAULT #1	FAULT #2
$C = \frac{1 \times 1000}{0.24} = 4,167$ $I_{FLA} = \frac{kVA \times 1000}{E_{L-L} \times 1.732} = \frac{75 \times 1000}{360 \times 1.732} = 120 \text{ AMP}$ $\text{MULTIPLIER} = \frac{100}{\text{TRANSF. \%Z}} = \frac{100}{5} = 20$ $I_{SCS} = 120 \times 20 = 2,400 \text{ AMP}$ $f = \frac{1.732 \times L \times I}{N \times C \times E_{L-L}} = \frac{1.732 \times 100 \times 2,400}{1 \times 4,167 \times 360} = 0.28$ $M = \frac{1}{1+f} = \frac{1}{1+0.28} = 0.78$ $I_{SCS} = 2,400 \times 0.78 = 1,872 \text{ AMP}$	$f = \frac{1.732 \times L \times I}{N \times C \times E_{L-L}} = \frac{1.732 \times 50 \times 2,400}{1 \times 4,167 \times 360} = 0.14$ $M = \frac{1}{1+f} = \frac{1}{1+0.14} = 0.88$ $I_{SCS} = 4,167 \times 0.88 = 3,666 \text{ AMP}$
SHORT CIRCUIT CURRENT (RMS, SYM)	



2 SHORT CIRCUIT CALCULATIONS

SCALE: N.T.S.

THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND WERE MADE FROM THE BEST INFORMATION AVAILABLE. CONFIRM ALL EXISTING LOCATIONS, DIMENSIONS, ELECTRICAL SERVICE, VOLTAGE, A/C UNITS, DUCTS, PIPE AND PLUMBING FIXTURES BEFORE START OR PURCHASE ANY EQUIPMENT. VISIT THE SITE PRIOR TO START WORK OR BID. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONDITIONS AS THEY EXIST AND NO ADDITIONAL COST WILL BE ALLOWED FOR READILY OBSERVABLE CONDITIONS.

NOTE AVAILABLE FAULT CURRENT LABELING:

IN LIEU OF THE MAXIMUM AVAILABLE FAULT CURRENT MAKING AS REQUIRED BY 110.24, A PERMANENTLY AFFIXED LABEL SHALL BE APPLIED WITH THE FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE 2"X3" IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. THIS LABEL SHALL ALSO INCLUDE THE DATE OF THE CALCULATION.

GROUNDING AND BONDING

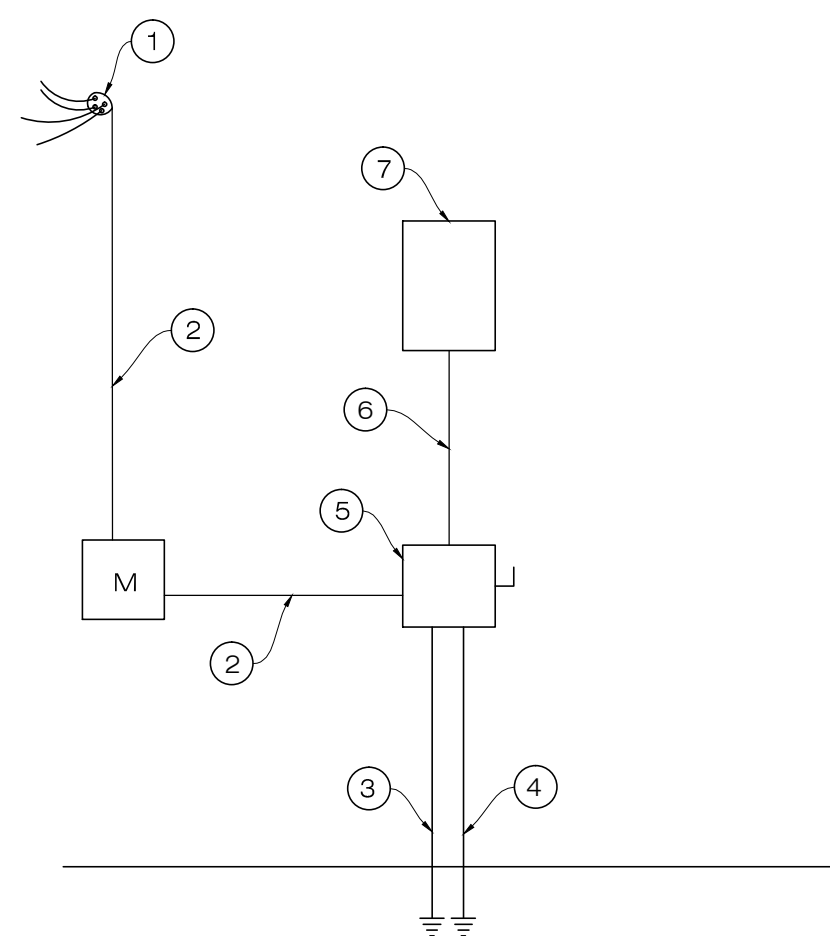
ALL GROUNDING ELECTRODES AS DESCRIBED IN 250.52(A)(1) THROUGH (A)(6) THAT ARE REPRESENTED AT EACH BUILDING OR STRUCTURE SERVED SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM, WHERE NONE OF THESE GROUNDING ELECTRODES EXIST, OR MORE OF THE GROUNDING ELECTRODES SPECIFIED IN 250.52(A)(4) THROUGH (A)(7) SHALL BE INSTALLED AND USED. ARTICLE 250.50 N.E.C.

CONCRETE-ENCASED ELECTRODE:

ALL GROUNDING ELECTRODES AS DESCRIBED IN 250.52(A)(1) THRU (A)(6) THAT ARE PRESENT SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM. THIS REQUIREMENTS INCLUDES THE CONCRETE-ENCASED ELECTRODE. THIS ELECTRODE IS REQUIRED TO BE SHOWN ON THE ON-LINE DIAGRAM. WHERE NONE OF THESE GROUNDING ELECTRODES EXISTS, ONE OR MORE ON THE GROUNDING ELECTRODES SPECIFIED IN 250.52(A)(4) THROUGH (A)(7) SHALL BE INSTALLED AND USED.

3 ONE-LINE DIAGRAM

SCALE: N.T.S.



FEEDER SCHEDULE

- ① NORMAL POWER SUPPLY 208/120, 200 AMP, 4#3/0, 2°C (THHN/THWN, CU, 600V, INS)
- ② 4#3/0, 1#6 (G), 2" C PER SET (THHN/THWN, CU, 600V, INS)
- ③ #4 CU, GND TO GROUND (3/4"X10)
- ④ #2 CU, BOND TO MAIN METALLIC WTR PIPE LINE AND BLDG STRUCTURE
- ⑤ 200 A FUSED DISC SW W/3-200A FUSES 100 KAIC, NEMA-1
- ⑥ 4#3/0, 1#6 (G), 2" C PER SET (THHN/THWN, CU, 600V, INS)
- ⑦ PANEL A, 200 AMP, MCB, 3Ø, NEMA-1

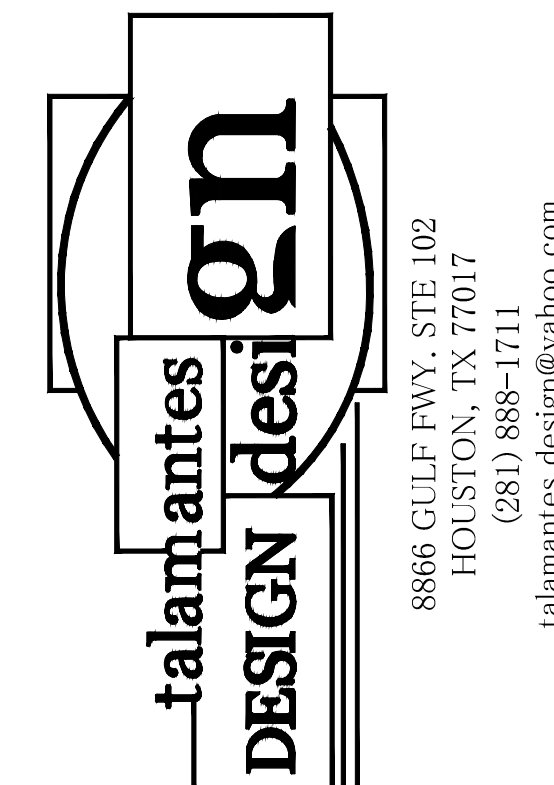
ELECTRICAL LOAD ANALYSIS

208/120, 3Ø, 4W
200 AMP SERVICE

DESCRIPTION	CONNECT LOAD	DEMAND FACTOR	NEC DEMAND
LIGHTING (BUILDING)	5,250	125%	6,563
RECEPTACLES	3,000	(Per 100VA-100%)	3,000
H.V.A.C	7,500	100%	7,500
MOTOR LOAD	1,875	100%	1,875
MISCELLANEOUS	8,600	100%	8,600
TOTAL VOLT-AMPERES	26,225	-	27,538
TOTAL LOAD (AMPS)	73	-	77

4 LOAD ANALYSIS

SCALE: N.T.S.



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HOUSTON TX. 77028

ISSUE LOG

	DATE	DESCRIPTION
PRE		
PMT		
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⚠		

PROJECT NO:

CHECKED BY: M.A.T

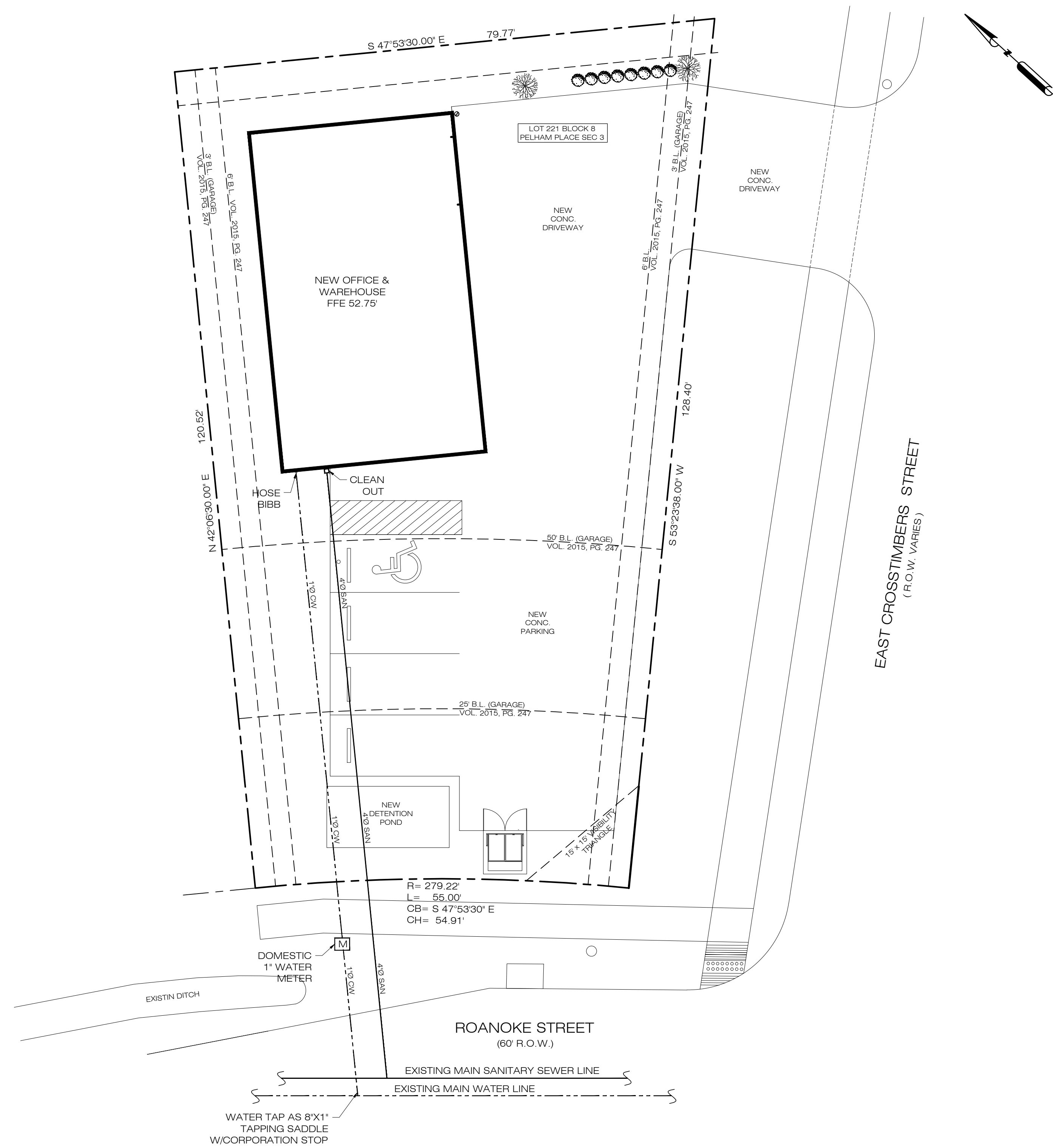
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SHEET No.

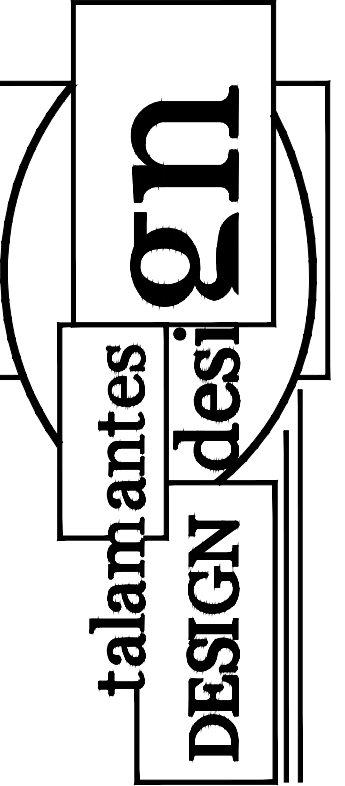
PANEL / LOAD

SHEET No.

E4.0



1 UTILITY PLAN
SCALE: 3/32"=1'-0"



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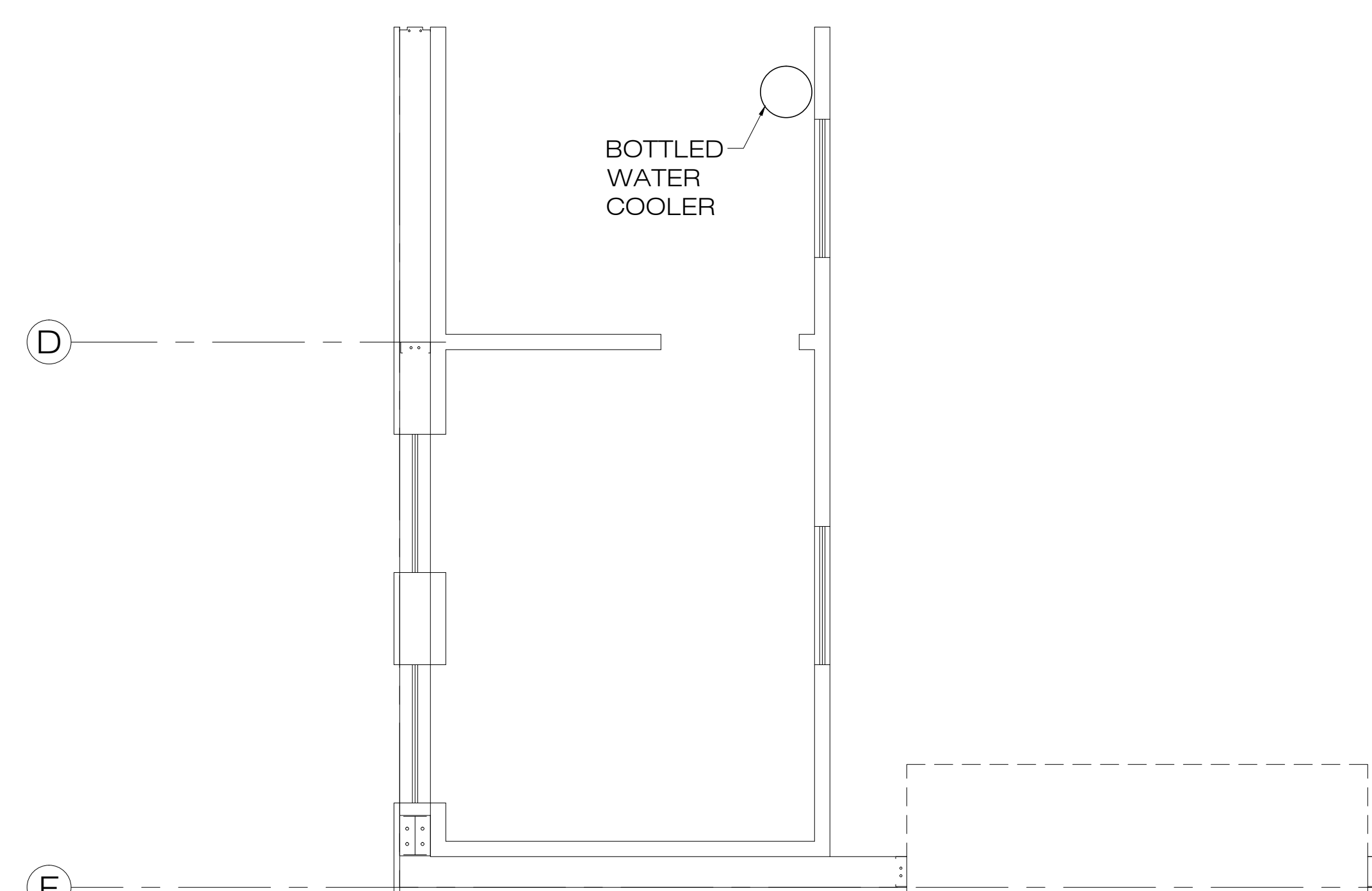
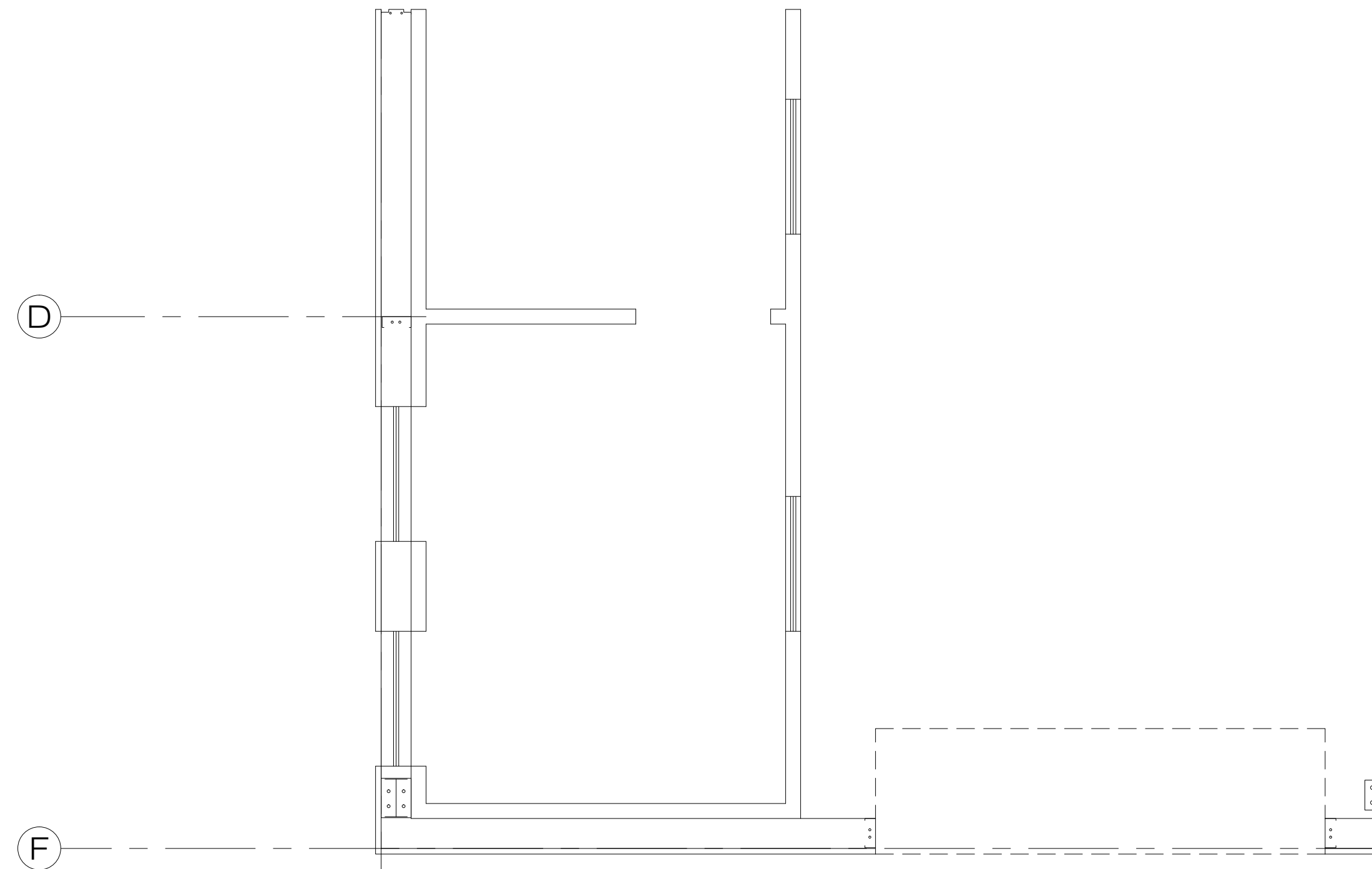
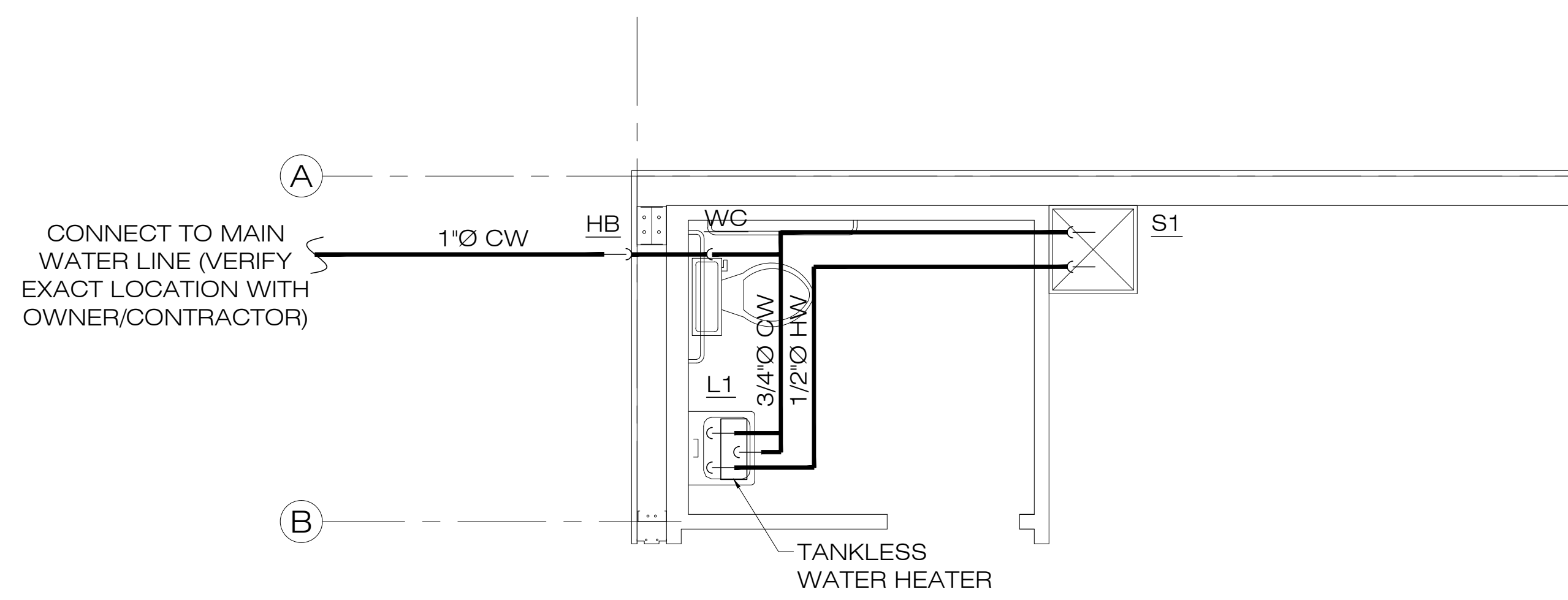
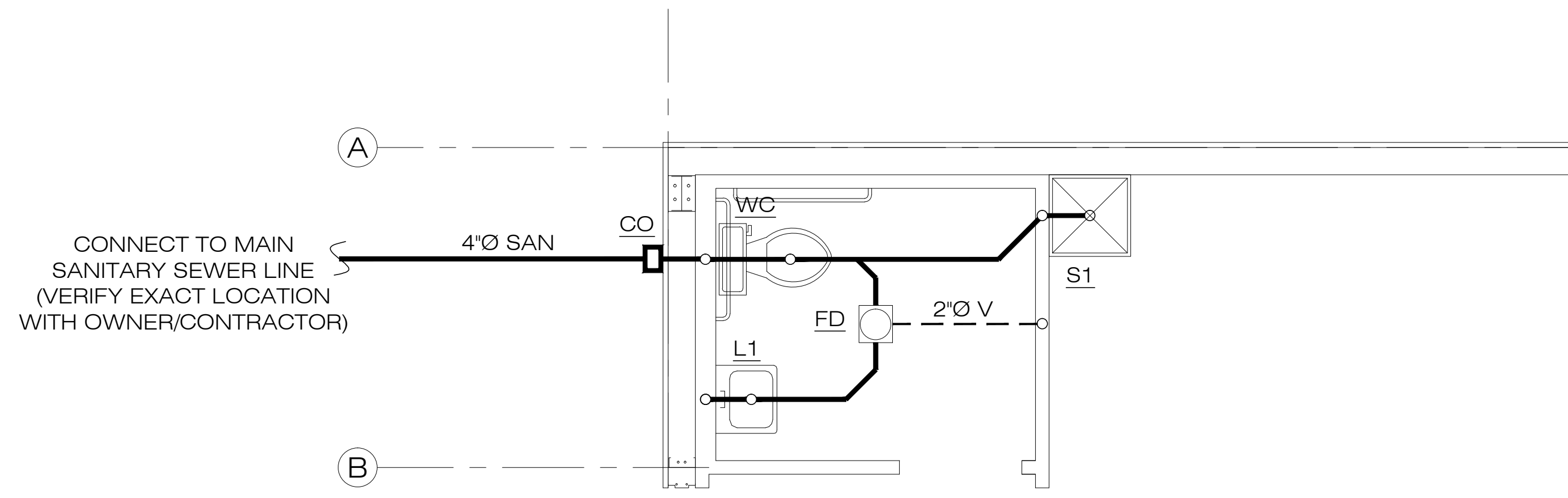
DATE OF ISSUE:

SHEET No.

UTILITY PLAN

SHEET No.

C6.0



1 ENLARGED SANITARY SEWER PLUMBING PLAN
SCALE: 3/8"=1'-0"

2 ENLARGED WATER LINE PLUMBING PLAN
SCALE: 3/8"=1'-0"

THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND WERE MADE FROM THE BEST INFORMATION AVAILABLE. CONFIRM ALL EXISTING LOCATIONS, DIMENSIONS, ELECTRICAL SERVICE, VOLTAGE, A/C UNITS, DUCTS, PIPE AND PLUMBING FIXTURES BEFORE START OR PURCHASE ANY EQUIPMENT. VISIT THE SITE PRIOR TO START WORK OR BID. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONDITIONS AS THEY EXIST AND NO ADDITIONAL COST WILL BE ALLOWED FOR READILY OBSERVABLE CONDITIONS.

- SANITARY SEWER LINE (SAN)
- GREASE LINE (GL)
- - - SANITARY VENT LINE (V)
- - - COLD WATER LINE (CW)
- - - HOT WATER LINE (HW)
- - - GAS LINE (G)
- ▭ TRENCH FLOOR DRAIN
- FLOOR DRAIN/FLOOR SINK
- ⊙ GAS WATER HEATER
- FLOOR CLEAN OUT

3 LEGEND
SCALE: N.T.S.

THE WATER TEMPERATURE SHALL BE LIMITED TO A MAXIMUM OF 120 DEGREES TO LAVATORIES.

ISSUE LOG

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PROJECT NO:
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DATE OF ISSUE:
SHEET No.

PLUMBING PLAN

SHEET No.

PLUMBING FIXTURE SCHEDULE		
DESIG.	DESCRIPTION	MANUFACTURER
WC	WATER CLOSET 15" HIGH FLOOR MOUNTED BOTTOM OUTLET, WHITE V.C. 1.28 GPF LOW CONSUMPTION WATER CLOSET WITH SIPHON ACTION, ELONGATED RIM, 1-1/2" TOP SPUD, HEAVY DUTY WHITE PLASTIC OPEN FRONT SEAT LESS COVER.	GLACIER BAY MODEL #N2428RBN2428T
L1	WALL MOUNTED, SOLID SURFACE LAVATORY SYSTEM CONCEALED ARMS, T.S./D.S COMPLAINT, SELF DRAINING DECK, FAUCET HOLES ON 4" CENTERS WITH OPEN GRID STRAINER AND SENSOR FAUCET, P-TRAP AND SUPPLY KIT.	GLACIER BAY MODEL #13-0013-4WHD
FD	D.C.C.I. BODY, TYPE 'S', 5" SQ. LIGHT DUTY HEEL PROOF TOP, 1/2" TRAP SEAL PRIMER CONNECTION, HUB OUTLET, CLAMPING COLLAR, V.P. SCREWS, WITH PROSET TRAP GUARD	ZORO MODEL #G5367713
TWH	TANKLESS WATER HEATER; HOT WATER OUT- PUT RANGE 103"-128", 208V	RHEEM MODEL #RETEX-36
S1	FLOOR MOUNTED PRECAST SQUARE MOLDED STONE MOP SERVICE BASIN W/10" HIGH SIDES, 6" DROP FRONT, STAINLESS STEEL CAST INTEGRAL DRAIN, ALUMINUM BUMPER, SERVICE FAUCET WITH AND WALL SUPPORT, MOP HANGER, HOSE AND HOSE BRACKET.	ZORO MUSTEE MODEL #G1548023

PLUMBING CONNECTION SCHEDULE						
DESIGN	# OF UNITS	FIXTURE	WASTE	VENT	CW	HW
WC	1	WATER CLOSETS	4"	2"	1"	--
L1	1	LAVATORY	2"	2"	1/2"	1/2"
FD	1	FLOOR DRAIN	2"	2"	--	--
S1	1	MOP SINK	2"	2"	1/2"	1/2"

NOTES:
1. SIZES SHOWN ARE MINIMUM CONNECTION SIZES TO A SINGLE FIXTURE.
2. ALL WASTE PIPING BELOW GRADE SHALL BE MINIMUM 2".

- CONNECT NEW SANITARY WASTE LINE TO EXISTING SANITARY WASTE LINE VERIFY EXACT SIZE, LOCATION AND INVERT ELEVATION OF EXISTING IN THE FIELD. SIZE AS NOTED ON THE PLAN.
- CONNECT NEW SANITARY VENT LINE TO NEAREST EXISTING SANITARY VENT LINE IN THIS AREA. FIELD VERIFY EXACT LOCATION.
- CONNECT NEW COLD AND HOT WATER LINES TO EXISTING COLD AND HOT WATER LINES AT APPROXIMATELY THIS LOCATION. SIZE AS NOTED ON THE PLAN. VERIFY EXACT LOCATION OF EXISTING IN THE FIELD.
- CONNECT NEW HOT WATER LINE TO EXISTING HOT WATER LINE. VERIFY EXACT LOCATION OF EXISTING IN THE FIELD.
- PROVIDE INSULATING GATE VALVES FOR ALL BRANCHES OFF DOMESTIC WATER MAINS. ALL PLUMBING SYSTEM VALVES SHALL BE INSTALLED IN ACCESSIBLE CEILING SPACES. WHERE CEILING IS NOT ACCESSIBLE, OR SOACE IS CONFLICTING, VALVES SHALL BE INSTALLED IN PARTITIONS OR PIPE CHASES.
- ALL HOT WATER AND HOT WATER CIRCULATING PIPING SHALL HAVE 1" THICK FIBERGLASS INSULATION WITH ALL SERVICE JACKET AND SELF SEALING LAP JOINT.
- ALL PIPE PASSING THROUGH FLOORS OR WALLS WHICH ARE FIRE RATED SHALL BE SUPPORTED AT PENETRATION AND SHALL BE SEALED WITH APPROVED FIRE STOP MATERIALS AS REQUIRED BY BUILDING CODES.
- CONTRACTOR SHALL COORDINATE WITH STRUCTURAL CONDITIONS AT THE SITE AND PROVIDE PROPER ROUGH-IN CONNECTIONS AS REQUIRED WITHOUT DAMAGE TO STRUCTURE. WHERE MODIFICATIONS TO STRUCTURAL MEMBERS ARE REQUIRED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD COORDINATING ALL PLUMBING PIPING AND SLEEVE LOCATIONS WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF ANY PIPING OR SUPPORTS.
- DO NOT SCALE PLUMBING DRAWINGS. REFER TO DIMENSIONED ARCHITECTURAL OR EQUIPMENT DRAWING FOR EXACT LOCATIONS OF FIXTURES OR EQUIPMENT WITH CONNECTIONS.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS AND DIMENSIONS OF FINISHED FLOORS AND WALLS TRUE ALL DRAINS, ROUGH-IN S AND CARRIERS IN ACCORDANCE WITH PROPOSED ELEVATIONS AND FINISHED SURFACES.
- MOUNTING HEIGHT ELEVATIONS OF ALL WALL HUNG OR COUNTER MOUNTED FIXTURES SHALL BE COORDINATED WITH THE OWNER PRIOR TO INSTALLATION OF ROUGH-IN WORK.
- FOR ALL FIXTURES AND EQUIPMENT WITH ASSOCIATED TRIM OR COMPONENT ACCESSORIES PROVIDED UNDER SEPARATE DIVISIONS AND REQUIRING PLUMBING CONNECTIONS; THIS CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENT OF, MAKE PROVISIONS FOR, AND SUPPLY ALL MATERIALS AND LABOR FOR MAKING FINAL CONNECTIONS.
- CONTRACTOR SHALL REFER TO SHOP DRAWING OF EQUIPMENT TO BE SUPPLIED FOR FINAL COORDINATION OF ALL ROUGH-IN OPENINGS BEFORE BEGINNING WORK.
- ALL ROUGH IN OPENINGS SHALL BE FITTED WITH CHROME PLATED, WROUGHT BRASS DEEP BELL OR BOX ESCUTCHEON PLATES FITTED TIGHT TO THE PIPE AND FLUSH TO THE WELL.
- ALL EXPOSED BRASS SHALL BE CHROME PLATED.
- ALL HANDICAPPED ACCESSIBLE FIXTURES SHALL BE PROVIDED OF APPROVED TYPES AND WITH REQUIRED CONTROLS AND INSTALLED TO HEIGHTS AND CLEARANCES, AS PRESCRIBED BY AMERICAN WITH DISABILITIES ACT (ADA). FIXTURES SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ACCESSIBILITY CODE REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONED MOUNTING HEIGHTS AND SPECIFIED CLEARANCE REQUIREMENTS. PROVIDE FIXTURES WITH DEPTHS AT MAXIMUM PERMITTED AND AVAILABLE FOR INTENDED FIXTURE USE.
- ALL WHEELCHAIR LAVATORY AND SINK PIPING WHERE EXPOSED BE INSULATED. PROVIDE OFFSET DRAIN FITTINGS WHERE REQUIRED TO PROVIDE MINIMUM CLEARANCES.
- SEE ALL SPACES BETWEEN PLUMBING FIXTURES AND MOUNTING SURFACES WITH LATEX CAULK WIPED SMOOTH AND FLUSH WITH FIXTURE.
- FLOOR DRAINS SHALL BE INSTALLED AT LOW POINTS OF UNIFORMLY SLOPED FLOOR. CONTRACTOR SHALL FIELD COORDINATE WITH STRUCTURAL TO INSURE FLOORS ARE SLOPED UNIFORMLY ACROSS ENTIRE TOILET ROOMS OR OVER AS WIDE AN AREA AS PRACTICAL FOR OPEN AREA FLOOR DRAINS. CONVEX FLOOR SLOPE IN THE IMMEDIATE VICINITY OF THE FLOOR DRAIN IS NOT ACCEPTABLE.

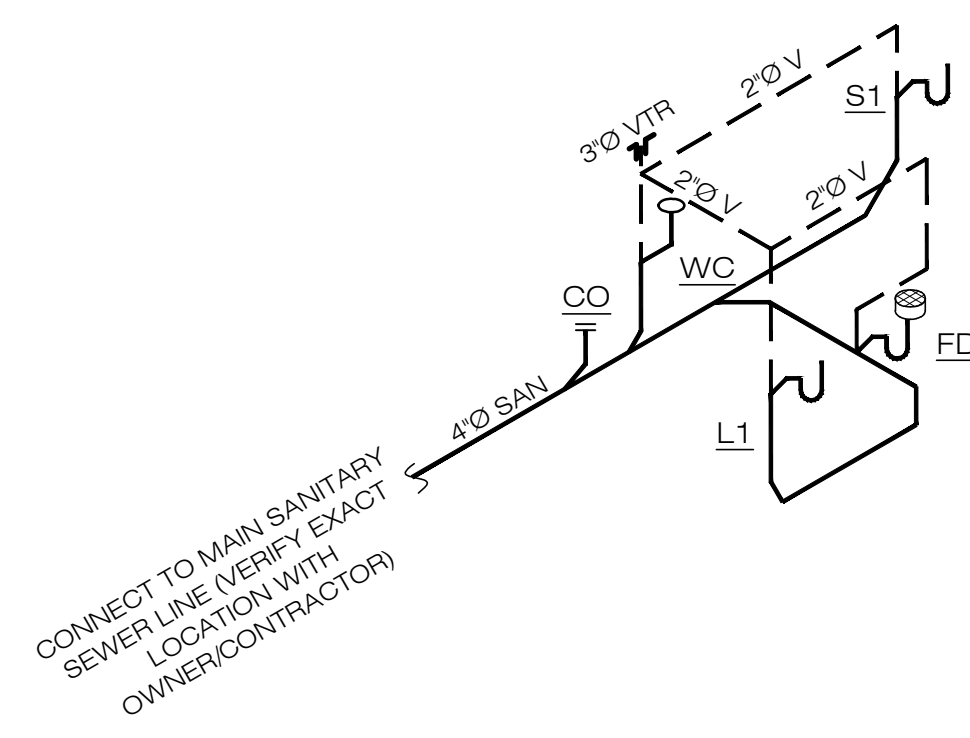
1 PLUMBING GENERAL NOTES

SCALE: N.T.S.

PIPE MATERIAL LEGEND	
A	WATER PIPING INSIDE BUILDING WILL BE CPVC
B	SANITARY SEWER SHALL USE SCHEDULE 40 PVC
C	VENT PIPING SHALL USE SCHEDULE 40 PVC
D	CLEANOUTS SHALL USE ZURN OR APPROVED EQUAL
E	HOT WATER SHALL USE 1" BLACK FOAM INSULATION

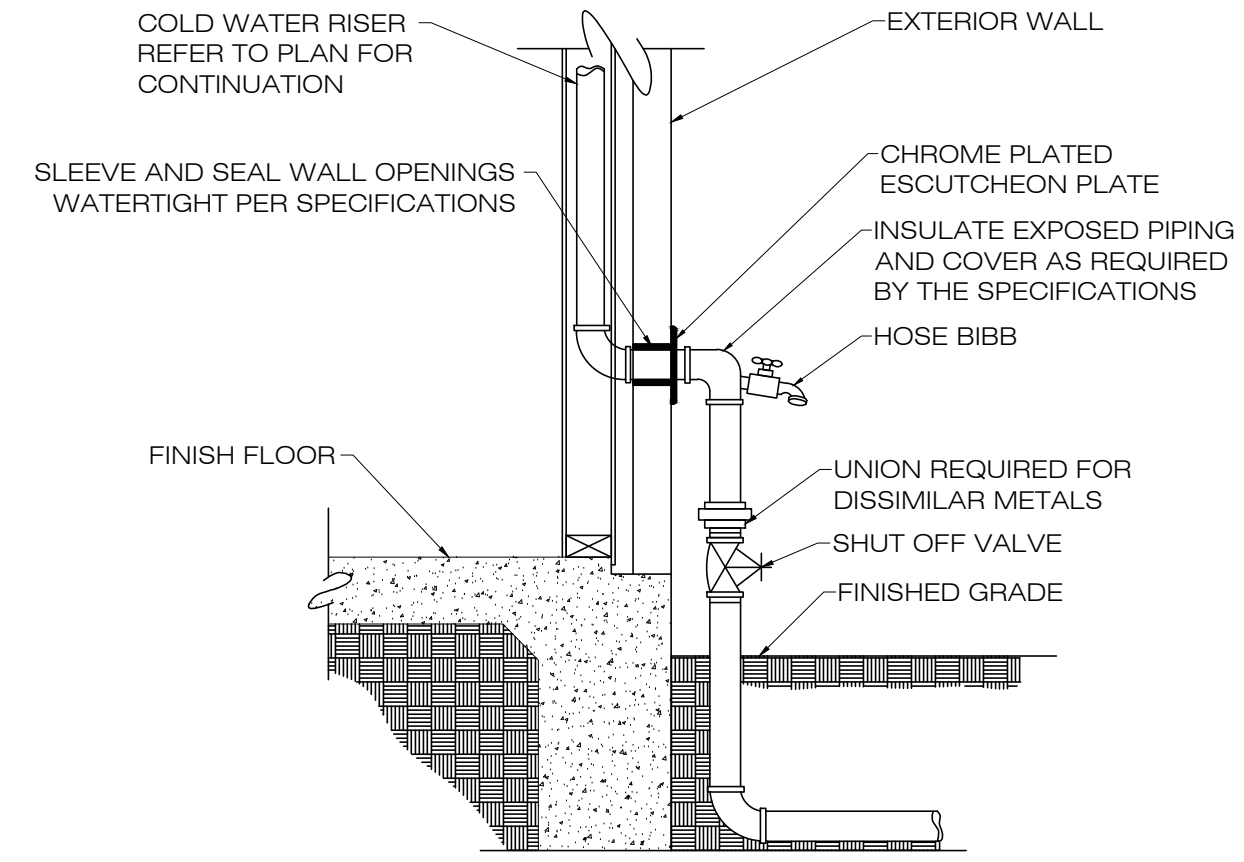
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- THE CONTRACTOR SHALL EXERCISE CAUTION WHEN SAW-CUTTING TRENCHING AND EXCAVATING EXISTING CONCRETE SLABS.
- CONNECT NEW SANITARY WASTE LINE TO EXISTING SANITARY WASTE LINE VERIFY EXACT SIZE, LOCATION AND INVERT ELEVATION OF EXISTING IN THE FIELD. SIZE AS NOTED ON THE PLAN.
- PROVIDE INSULATING GATE VALVES FOR ALL BRANCHES OFF DOMESTIC WATER MAINS. ALL PLUMBING SYSTEM VALVES SHALL BE INSTALLED IN ACCESSIBLE CEILING SPACES. WHERE CEILING IS NOT ACCESSIBLE, OR SOACE IS CONFLICTING, VALVES SHALL BE INSTALLED IN PARTITIONS OR PIPE CHASES.
- ALL HOT WATER AND HOT WATER CIRCULATING PIPING SHALL HAVE 1" THICK FIBERGLASS INSULATION WITH ALL SERVICE JACKET AND SELF SEALING LAP JOINT.
- ALL PIPE PASSING THROUGH FLOORS OR WALLS WHICH ARE FIRE RATED SHALL BE SUPPORTED AT PENETRATION AND SHALL BE SEALED WITH APPROVED FIRE STOP MATERIALS AS REQUIRED BY BUILDING CODES.
- CONTRACTOR SHALL COORDINATE WITH STRUCTURAL CONDITIONS AT THE SITE AND PROVIDE PROPER ROUGH-IN CONNECTIONS AS REQUIRED WITHOUT DAMAGE TO STRUCTURE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD COORDINATING ALL PLUMBING PIPING AND SLEEVE LOCATIONS WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF ANY PIPING OR SUPPORTS.
- DO NOT SCALE PLUMBING DRAWINGS. REFER TO DIMENSIONED ARCHITECTURAL OR EQUIPMENT DRAWING FOR EXACT LOCATIONS OF FIXTURES OR EQUIPMENT WITH CONNECTIONS.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS AND DIMENSIONS OF FINISHED FLOORS AND WALLS TRUE ALL DRAINS, ROUGH-IN S AND CARRIERS IN ACCORDANCE WITH PROPOSED ELEVATIONS AND FINISHED SURFACES.
- FOR ALL FIXTURES AND EQUIPMENT WITH ASSOCIATED TRIM OR COMPONENT ACCESSORIES PROVIDED UNDER SEPARATE DIVISIONS AND REQUIRING PLUMBING CONNECTIONS; THIS CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENT OF, MAKE PROVISIONS FOR, AND SUPPLY ALL MATERIALS AND LABOR FOR MAKING FINAL CONNECTIONS.
- CONTRACTOR SHALL REFER TO SHOP DRAWING OF EQUIPMENT TO BE SUPPLIED FOR FINAL COORDINATION OF ALL ROUGH-IN OPENINGS BEFORE BEGINNING WORK.
- ALL HANDICAPPED ACCESSIBLE FIXTURES SHALL BE PROVIDED OF APPROVED TYPES AND WITH REQUIRED CONTROLS AND INSTALLED TO HEIGHTS AND CLEARANCES, AS PRESCRIBED BY AMERICAN WITH DISABILITIES ACT (ADA). FIXTURES SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ACCESSIBILITY CODE REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONED MOUNTING HEIGHTS AND SPECIFIED CLEARANCE REQUIREMENTS. PROVIDE FIXTURES WITH DEPTHS AT MAXIMUM PERMITTED AND AVAILABLE FOR INTENDED FIXTURE USE.
- ALL WHEELCHAIR LAVATORY AND SINK PIPING WHERE EXPOSED BE INSULATED. PROVIDE OFFSET DRAIN FITTINGS WHERE REQUIRED TO PROVIDE MINIMUM CLEARANCES.
- PLUMBING CONTRACTOR TO PROVIDE TRAP PRIMERS TO ALL FLOOR DRAINS.
- PLUMBING CONTRACTOR TO COORDINATE ALL PIPING ROUTING ABOVE CEILING / OVERHEAD WITH MECHANICAL AND ELECTRICAL CONTRACTORS BEFORE INSTALLING.
- DO NOT INSTALL PLUMBING VENTS WITHIN 10' - 10' OF ANY OUTSIDE AIR UNITS / INTAKES. COORDINATE WITH MECHANICAL CONTRACTOR.
- ALL VALVES SHALL BE INSTALLED NO HIGHER THAN 2'-0" ABOVE CEILING. ACCESS DOORS TO BE INSTALLED AT ALL HARD CEILING LOCATIONS.



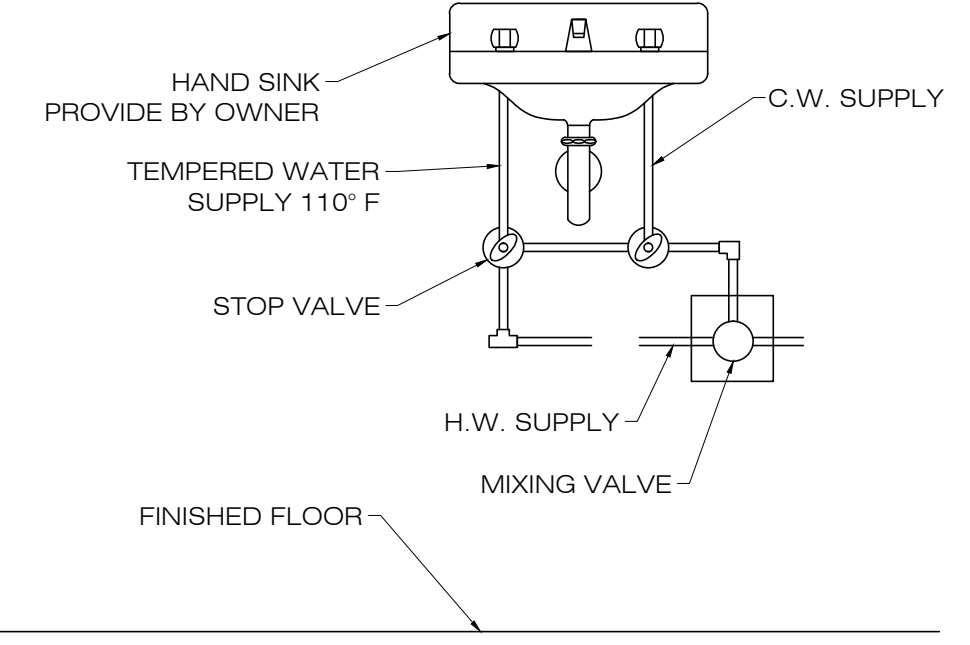
2 SANITARY SEWER RISER DIAGRAM

SCALE: N.T.S.



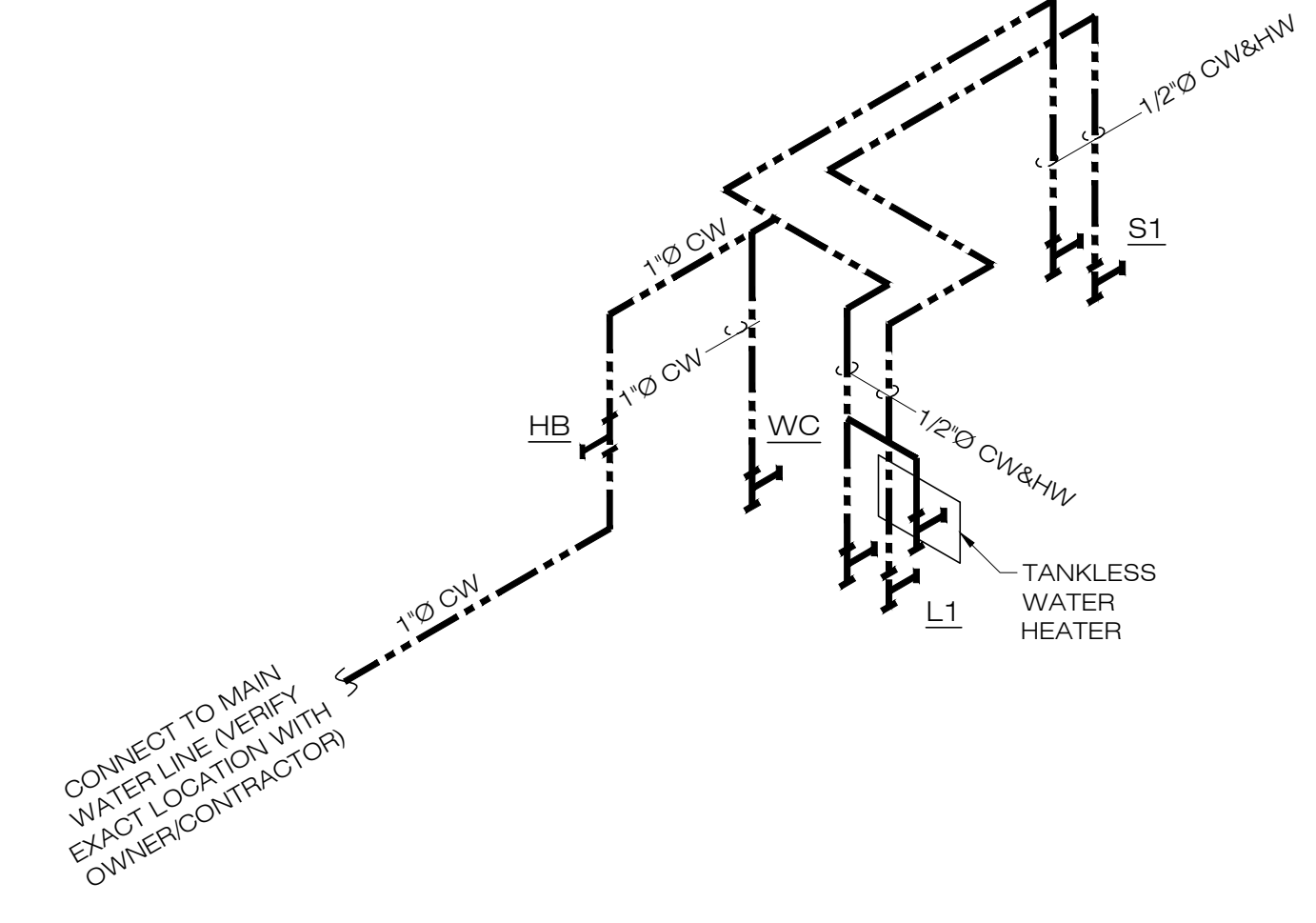
4 WATER ENTRY DETAIL

SCALE: N.T.S.



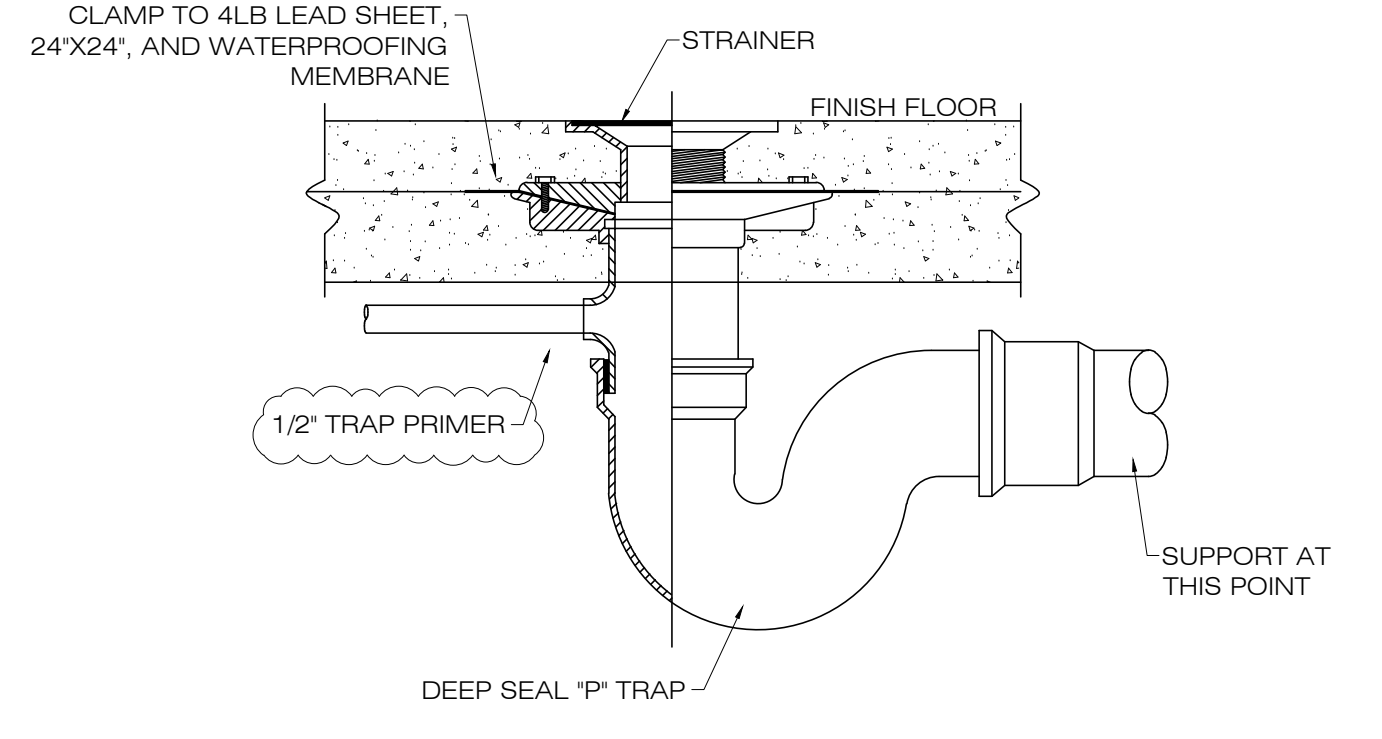
6 MIXING VALVE DETAIL

SCALE: N.T.S.



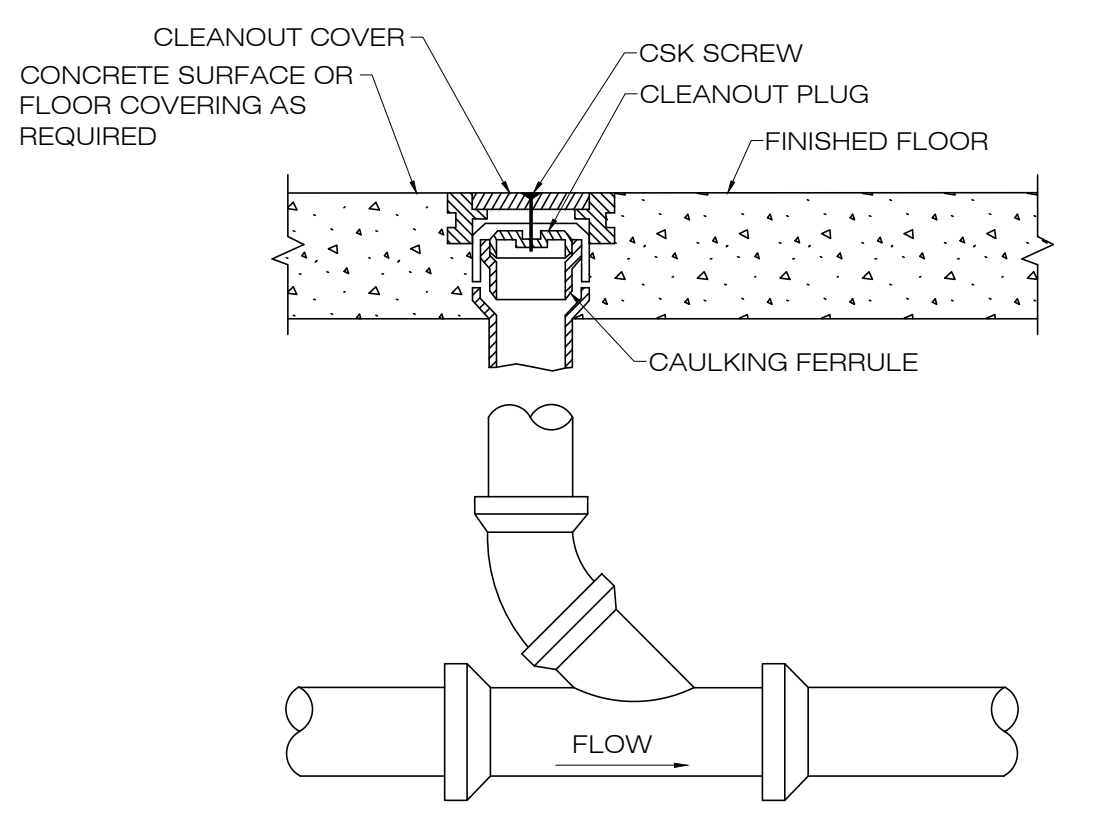
3 WATER RISER DIAGRAM

SCALE: N.T.S.



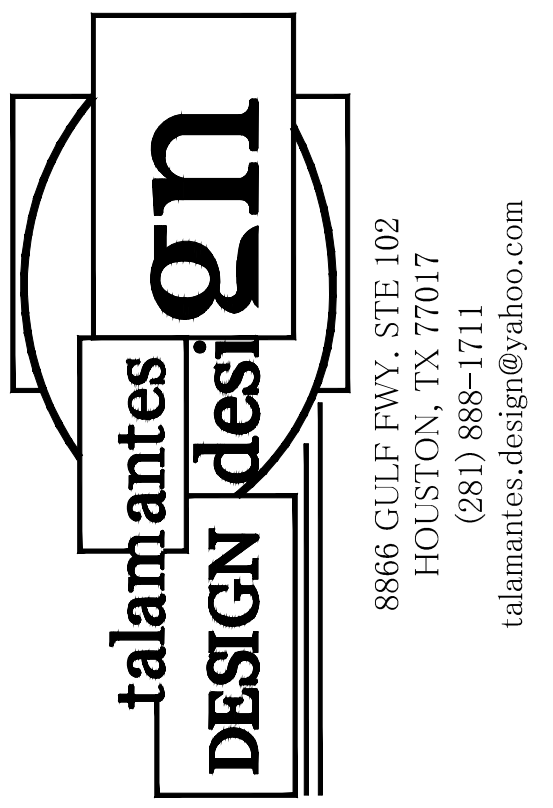
5 FLOOR DRAIN DETAIL

SCALE: N.T.S.



7 EXTERIOR FLOOR CLEAN OUT

SCALE: N.T.S.



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PLUMBING DETAILS

SHEET No.

P2.0