

ISSUE LOG

NO.	DATE	DESCRIPTION
1	06-15-2012	APPROVAL
0	07-11-2012	PERMIT

CONSULTANT: (P) Consulting LP
 11210 Shepherd Dr., #602
 Houston, Texas 77066
 Phone: 713-867-1111 ext. 16
 Contact Copy Holder: P.E.
 TYPE Form No. 4385

ENGINEER



PROJECT NAME:
 Northpark Polys Sub-Station
 6000 Teague Road
 Houston, Texas 77041
 Foundation Repair

CITY OF HOUSTON
 GENERAL SERVICES
 DEPARTMENT

REVIEWED: _____
 DESIGNER: _____
 DATE: MAY 18, 2012
 SCALE: 3/8"=1'-0"
 DRAWN BY: JMK
 CHECKED BY: GJM
 SHEET TITLE:
 GENERAL NOTES
 SHEET NO.:
 CITY DWG. NO.: S0.0

GENERAL NOTES

1. THE BUILDING CODE USED IS INTERNATIONAL BUILDING CODE (IBC-2006) 2006 EDITION.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO COMMENCING WORK. THE DIMENSION SHALL BE NOTIFIED OF ANY DISCREPANCIES WHICH MAY EXIST.
3. ALL FOOTINGS ARE TO BE PLACED ON FIRM AND CLEAN SOIL. THE SOIL BEHIND THE SOIL BEHIND PRESSURE SHOULD BE REFERRED TO THE EXISTING RECORD DRAWINGS.
4. SET ARCHITECTURAL DRAWINGS FOR FLOOR ELEVATIONS, STAIRS, AND THE LOCATION OF DEPRESSIONED FLOOR AREAS. THE CONTRACTOR SHALL COMPLY WITH THE ARCHITECTURAL SECTIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING ON INSTALLATION WORKERS.
5. PRINCIPAL OPERATIONS THROUGH THE FRAMING ARE SHOWN ON THESE DRAWINGS. THE GENERAL CONTRACTOR SHALL EXAMINE THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR THE REQUIRED OPERATIONS AS HE SHALL PROVIDE FOR ALL OPERATIONS THROUGH THE FRAMING. THE CONTRACTOR SHALL VERIFY THE LOCATION AND LOCATION OF ALL OPERATIONS WITH THE MECHANICAL CONTRACTOR. ANY DEVIATION FROM THE OPERATIONS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE DIMENSIONER'S ATTENTION FOR APPROVAL.
6. SLABS ON GRADE SHALL BE PLACED ON FILL COMPACTED AS REQUIRED BY THE GEOTECHNICAL (SOILS) REPORT.

DESIGN LIVE LOADS:	POUNDS PER SQ. FT.
FIRST FLOOR	40
SECOND FLOOR	40
BALCONY	60
UNDEVELOPED DEAD LOAD	15
MECHANICAL AND CEILING	7
7. FINISHES WHEREVER SHOWN ON ARCH. DRAWINGS AS REQUIRED FOR FINISHES SHALL BE PLACED ON TOP OF THE CONCRETE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND LOCATION OF ALL OPERATIONS WITH THE MECHANICAL CONTRACTOR. ANY DEVIATION FROM THE OPERATIONS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE DIMENSIONER'S ATTENTION FOR APPROVAL.

DESIGN

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE UNIFORM BUILDING CODE, LATEST EDITION OR LOCAL BUILDING CODES WHERE APPLICABLE.
2. THE FOUNDATION IS DESIGNED IN ACCORDANCE WITH CURRENT ACCEPTABLE ENGINEERING PRACTICES FOR THE SITE SHOWN ON THE PLANS AND MAY NOT BE USED IN ANY OTHER LOCATION.
3. AS WITH ALL GROUND-SUPPORTED SLABS, THIS FOUNDATION IS DESIGNED TO RESIST THE UPLIFT AND DOWNWARD TENSION, TORSION, AND SHEAR CHECKS AS A RESULT OF THE CONCRETE CURING PROCESS.
4. THE DESIGN IS BASED ON THE FOLLOWING ASSUMPTIONS:
 - A. FINAL GRADING IS COMPLETED AS OUTLINED IN THE GENERAL NOTES - SITEWORK.
 - B. FINAL GRADE AND A FAMILY UNIFORM MOISTURE LEVEL IS MAINTAINED FOR THE LIFE OF THE FOUNDATION.
 - C. THE FOUNDATION IS NOT INSTALLED DURING A DRY OR WET PERIOD WHICH COULD BE DANGEROUS TO THE FOUNDATION. THE CONTRACTOR SHALL VERIFY THE CASE BEHIND SHALL NOTIFY THE DIMENSIONER PRIOR TO REMEDIATION FOR A POSSIBLE REDESIGN.
 - D. THE FOUNDATION IS DESIGNED IN ACCORDANCE WITH THE FOLLOWING GEOTECHNICAL INVESTIGATION:
 - SOIL REPORT NO. 1256433
 - BY: AAR ENGINEERING AND TESTING, INC.
 - DATE: MAY 01, 2012
5. FLOORING DESIGN IS BASED ON AN ASSUMED BEARING PRESSURE OF 3000 PSF. THE DESIGNER HAS ASSUMED A DESIGN LOAD OF 14 FT. BELOW EXISTING GRADE AND 3750 PSF FOR TOTAL LOADS.
6. NOTES FOR BILLED FOOTINGS SHALL BE CLEAN FILL AND CONCRETE SHALL BE PLACED THE SAME DAY AS EXCAVATION.
7. STAR, HORIZONTAL AND GUARDRAIL DESIGN:
 - STAR TRAILS: MINIMUM PERMANENT LOAD IS 300 LBS. (ON AREA OF 4 SQUARE FEET) AND APPROXIMATE TO 200 LBS. (ON AREA OF 1 SQUARE FEET). DIMENSIONS AND GUARDS ARE DESIGNED TO MEET THE REQUIREMENTS OF SECT. 1807.7.1. PROTECTING THE BROWLINE STRESS.

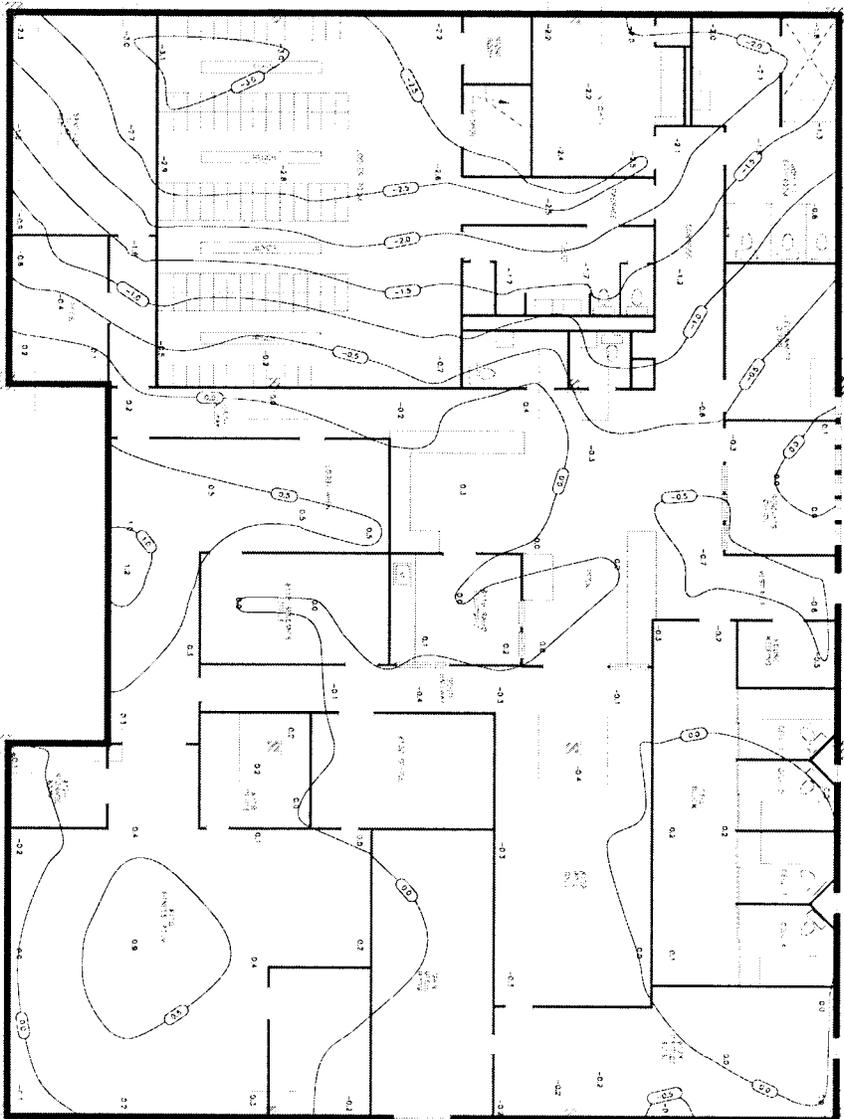
REINFORCING

1. REINFORCING SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE 2009 INTERNATIONAL BUILDING CODE (2009 IBC).
2. APPROVED EQUAL CONTACT FROM BUSHMAN AT 210-786-3107 OR BUSHMAN WILKS, P.E. AT 872-484-3800.
3. DIMENSIONS OF REINFORCING SHALL BE THE NUMBER, SIZE, SPACING, AND THICKNESS OF REINFORCING SHALL BE THE NUMBER, SIZE, SPACING, AND THICKNESS OF THE SPECIFIED REINFORCING.
4. REINFORCING SHALL BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF THE REINFORCING MANUFACTURER. REINFORCING SHALL BE HIGH ENOUGH TO ACHIEVE THE BEARING CAPACITY, INCLUDING THE SAFETY FACTOR, SPECIFIED BY THE APPROVED GEOTECHNICAL ENGINEER. THE MAXIMUM SPACING OF REINFORCING SHALL NOT EXCEED THE ALLOWABLE TORSIONAL CAPACITY OF THE FILL SWIRTS.
5. HELIXAL PILES SHALL BE DESIGNED AND MANUFACTURED TO RESIST ALL STRESSES INDUCED BY INSTALLATION.
6. THE TOP BEARING PLATE OF EACH PILE SHALL BE INSTALLED TO THE UNIFORM EMBEDMENT DEPTH SPECIFIED IN THESE DRAWINGS.
7. EXISTING CONDITIONS AND UNDERGROUND OBSTRUCTIONS SHALL BE CONFIRMED BY THE FIELD INSPECTOR PRIOR TO INSTALLATION. IT WILL BE NECESSARY TO REMOVE THE EXISTING REINFORCING, REPORT ANY UNDERGROUND OBSTRUCTIONS TO THE STRUCTURAL ENGINEER.
8. PILES DAMAGED BY EXCESSIVE TORQUE OR UNDERGROUND OBSTRUCTIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
9. LOCATIONS OF PILES SHALL NOT BE CHANGED WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER.
10. SPECIAL INSPECTION OF THE HELIXAL PILE INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 1704.10 OF THE 2009 IBC. THE INSPECTOR SHALL SIGN THE INSPECTION REPORT.
11. INSTALLATION DATE: _____
12. PILE MANUFACTURER: _____
13. REINFORCING CONTRACTOR: _____
14. IDENTIFICATION OF REINFORCING EQUIPMENT: _____
15. MINIMUM ALLOWABLE INSTALLATION TORQUE: _____
16. MINIMUM ALLOWABLE INSTALLATION TORQUE: _____
17. SHANK DIAMETER OF EACH PILE: _____
18. BEARING PLATE DIAMETER AND COMPENSATION OF EACH PILE: _____
19. ACTUAL EMBEDMENT OF EACH PILE: _____
20. ACTUAL INSTALLATION TORQUE OF EACH PILE: _____
21. ULTIMATE CAPACITY OF EACH PILE AS SPECIFIED BY MANUFACTURER: _____
22. ALLOWABLE CAPACITY OF EACH PILE AS SPECIFIED BY MANUFACTURER: _____
23. MEASURED AMOUNT OF VERTICAL REINFORCEMENT (UP OR DOWN) AT EACH PILE: _____

CONCRETE GENERAL NOTES

1. ALL CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A618, GRADE 60. ALL CONCRETE REINFORCING BARS SHALL BE WELDED TO A STEEL SECTION SHALL BE OF WELDED GRADE 40.
2. CONCRETE IN THE FOLLOWING AREA SHALL HAVE SAND AND GRAVEL AGGREGATE THE 1 PORTLAND CEMENT AND DESIGNATED COMPRESSIVE STRENGTH (P.C.) IN 28 DAYS:

GRADE BEAMS, PILES & FOUNDATIONS	4000 PSI
SLAB ON GRADE	4000 PSI
3. DETAILING OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH AS FOUNDATION 515, LATEST EDITION.
4. ALL ACCESSORIES, INCLUDING PLACING AND CURING OF CONCRETE SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE REINFORCING CONTRACTOR.
5. CONCRETE PROTECTION FOR REINFORCEMENT OF FORMED-IN-PLACE MEMBERS:
 - SLAB ON GRADE: 1-1/2" MIN. TOP, 3" MIN. BOTTOM.
 - GRADE BEAMS: 1-1/2" MIN. TOP, 3" MIN. BOTTOM, 3" MIN. SIDES.
 - DRILLED PIER: 3" MIN.
6. THERE SHALL BE NO HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE PILES. ALL CONSTRUCTION JOINTS SHALL BE MADE IN THE CENTER OF SPANS WITH VERTICAL BLUESIDES WHEN A BEAM INTERSECTS A PILE AT THIS POINT. THE CONTRACTOR SHALL NOTIFY THE DIMENSIONER PRIOR TO CONSTRUCTION JOINTS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. ADDITIONAL REINFORCING AT CONSTRUCTION JOINTS SHALL BE SPECIFIED BY THE ENGINEER.
7. ALL CONSTRUCTION REINFORCEMENT SHALL HAVE MINIMUM LAP OF "S" TYPE (ACE 318-89) AT SPICES UNLESS NOTED OTHERWISE.
8. PROVIDE STANDARD END CHAIRS WITH PROTECTIVE TIPS AND SPICES AT 5'-0" ON CENTER. PROVIDE STANDARD END CHAIRS AT 4'-0" UNIFORM SPICES EACH WAY FOR ALL TOP REINFORCEMENT FOR SLABS ON GRADE.
9. REINFORCING BARS MAY NOT BE WELDED WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
10. COMPAKITE ALL FOUNDATION WORK WITH PRE-ENGINEERED METAL BUILDING MANUFACTURER. SUBMIT METAL BUILDING DRAWINGS FOR ENGINEER'S APPROVAL.
11. ALL CONCRETE TESTING WILL BE ACCORDING TO AC-318 AND/OR PROTECT SPECIFICATION MANUAL A307.
12. PROVIDE 1/2" x 1/2" LONG ANCHOR BOLTS @ 3'-0" O.C. AT ALL EXTREMES. PROVIDE 1/2" x 1/2" LONG ANCHOR BOLTS @ 3'-0" O.C. AT ALL INTERMEDIATE POINTS. PROVIDE 1/2" x 1/2" LONG ANCHOR BOLTS @ 3'-0" O.C. AT ALL INTERMEDIATE POINTS. PROVIDE 1/2" x 1/2" LONG ANCHOR BOLTS @ 3'-0" O.C. AT ALL INTERMEDIATE POINTS. PROVIDE 1/2" x 1/2" LONG ANCHOR BOLTS @ 3'-0" O.C. AT ALL INTERMEDIATE POINTS.
13. ALL REINFORCING INSTALLATIONS NEED TO BE APPROVED UPON WITH THE OWNER AND DIMENSIONER PRIOR TO THE START OF THE WORK.
14. ALL CONSTRUCTION SHALL BE STRAIGHT, PLUMB, AND TRUE, AND BUILT TO THE DIMENSIONS SHOWN OR REQUIRED.
15. GENERAL GOOD HOUSEKEEPING PRACTICES ARE EXPECTED ON THIS PROJECT. THE CONTRACTOR SHALL OBTAIN PARTICULARLY ANY CONDITIONS WHICH MUST BE URGENT AND TAKE PREVENTIVE PRECAUTIONS.
16. THE GENERAL CONTRACTOR SHALL COMPAKITE ALL TRACES AND ACCESSORIES TO THE FOUNDATION WORK. THE CONTRACTOR SHALL NOTIFY THE DIMENSIONER PRIOR TO REMEDIATION FOR A POSSIBLE REDESIGN.



EXISTING FOUNDATION SLAB TOPOGRAPHY



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CONSULTANT:
 CONSULTANT/ CONSULTING, L.P.
 11210 Shepherd Dr., #202
 Houston, Texas 77065
 Phone: 282-0762/3110 ext. 15
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 Contact: Cory Wheeler, P.E.
 TYPE: Firm No. 4386

ENGINEER



PROJECT NAME:

Northwest Police Sub-Station
 6000 Teague Road
 Houston, Texas 77041
 Foundation Repair

CITY OF HOUSTON
 GENERAL SERVICES
 DEPARTMENT

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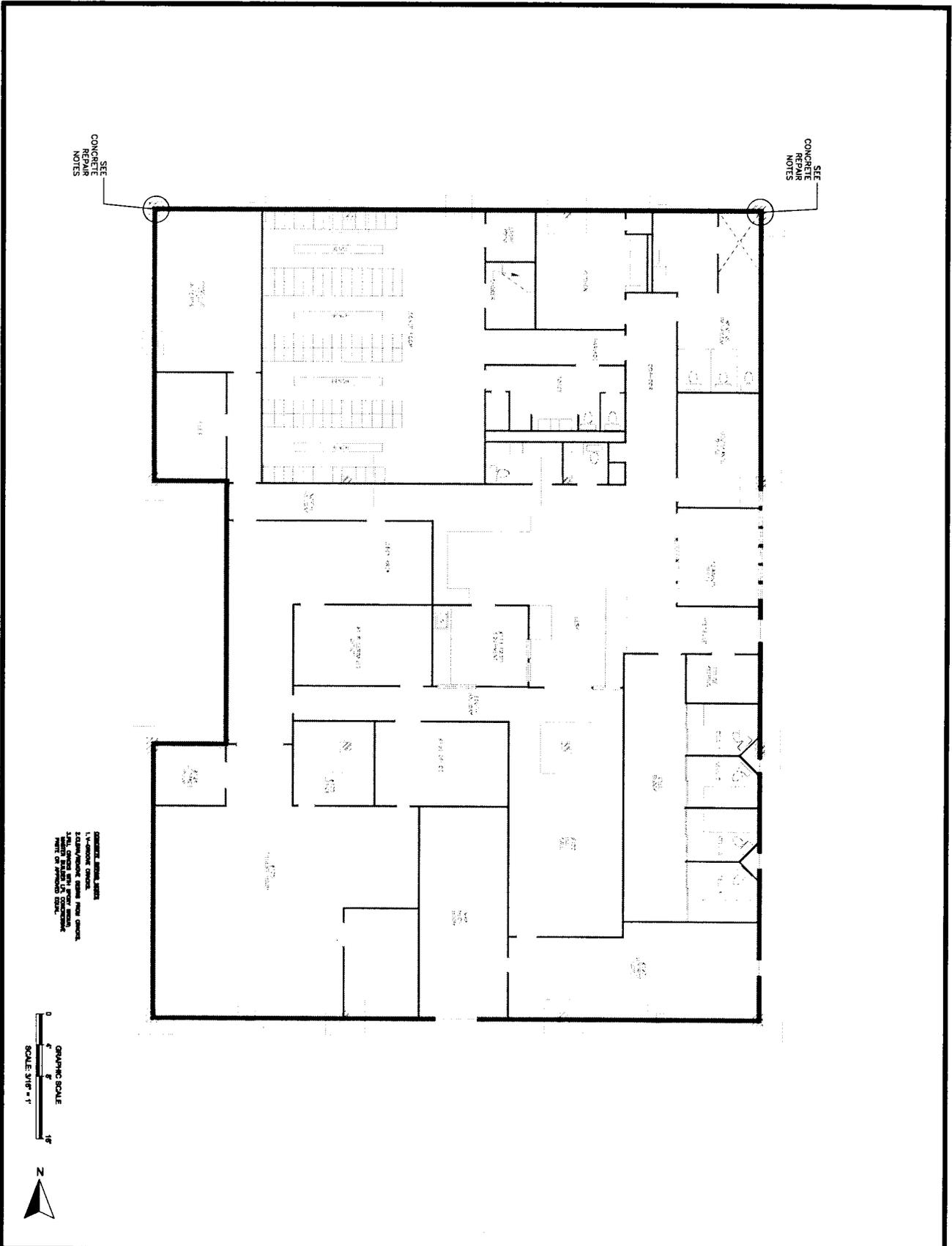
SHEET TITLE:

EXISTING CONDITIONS

SHEET NO.:

S1.0

CITY DWG. NO.:



SEE
CONCRETE
REPAIR
NOTES

SEE
CONCRETE
REPAIR
NOTES

GENERAL NOTES:
1. EXISTING FOUNDATION
2. EXISTING FOUNDATION SHALL BE REPAIRED TO ORIGINAL
3. ALL WORK SHALL BE IN ACCORDANCE WITH THE
LATEST EDITIONS OF ALL APPLICABLE CODES.

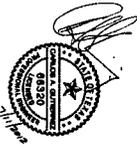


ISSUE LOG

NO.	DATE	DESCRIPTION
A	06.16.2012	APPROVAL
0	07.11.2012	PERMIT

CONSULTANTS:
 Structural
 11210 Shepherd Dr., #6 202
 Houston, Texas 77065
 Phone: 282-776-2110 ext. 18
 Contact: Cory Wheeler, P.E.
 TYPE: Firm No. 4386

ENGINEER



PROJECT NAME:
 Northwest Police Sub-Station
 6000 Teague Road
 Houston, Texas 77041
 Foundation Repair

CITY OF HOUSTON
GENERAL SERVICES
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SHEET TITLE:
 CONCRETE REPAIR

SHEET NO.:
 S3.0

CITY DWG. NO.: