



**RCA
CITY OF AUSTIN
RECOMMENDATION FOR COUNCIL ACTION**

**AGENDA ITEM NO.: 10
AGENDA DATE: Thu 03/11/2004
PAGE: 1 of 1**

SUBJECT: Approve a resolution approving the expansion of Texas NeuroRehab Center at 1106 W. Dittmar Road.

AMOUNT & SOURCE OF FUNDING: N/A

FISCAL NOTE: There is no unanticipated fiscal impact. A fiscal note is not required.

**REQUESTING Fire
DEPARTMENT:**

**DIRECTOR'S
AUTHORIZATION:** Gary Warren

FOR MORE INFORMATION CONTACT: Kevin Baum, Assistant Chief, 974-0145; Carl Wren, 974-0160

PRIOR COUNCIL ACTION: Ordinance 030410-12 on April 10, 2003.

BOARD AND COMMISSION ACTION: N/A

PURCHASING: N/A

MBE / WBE: N/A

The City of Austin passed Ordinance 030410-12 on April 10, 2003. Prior to new construction of facilities that may require evacuation assistance in areas between 200 feet and 500 feet from a hazardous liquids pipeline, this ordinance requires a Council resolution affirming that adequate safety measures are planned or are in place to ensure the safety of occupants with limited ability to take action to protect or protect themselves. The basis of such a resolution is to be a performance based design of such new construction that has been reviewed by the Austin Fire Department and found to afford reasonable protection and a reasonable opportunity for assisted evacuation.

Schirmer Engineering and Doucert & Associates have submitted a performance-based design for the expansion of the Texas NeuroRehab Center at 1106 W. Dittmar Road. The Austin Fire Department has reviewed the site plan, the building permit and the performance basis for the design and recommends that Council allow this expansion project to proceed with the understanding that the project must comply with the performance design as well as with other City of Austin development regulations.

RESOLUTION NO. 04

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

The City Council determines that the expansion design (SPC-03-0019C) for the Texas NeuroRehab Center at 1106 W. Dittmar Road is in compliance with Ordinance No. 030410-12 requiring that adequate safety measures be planned or are in place to ensure the safety of occupants requiring evacuation assistance.

ADOPTED: _____, 2004

ATTEST: _____

Shirley A. Brown
City Clerk

**Analysis of Texas Neurorehab Center Additions
and Alterations per City of Austin Code of
Ordinances Section 25-2-516(B)©**

Texas Neurorehab Center

1603 Dittmar Lane
Austin, Texas

February 2, 2004

**** Privileged and Confidential ****

Prepared for:

LZT Architects, Inc.
4107 Spicewood Springs Road, Suite 202
Austin, Texas 78731

Prepared by:

SCHIRMER ENGINEERING CORPORATION
7718 Wood Hollow Drive, Suite 120
Austin, Texas 78731

SEC Project No. 1703175-001



5.0 CONCLUSION

As shown in Section 4.6 of this report, the temperature rise and radiant heat energy at the exterior wall of Wing D and the pool building, from a 335 MW gasoline pool fire representing a leak in the hazardous pipeline, are not anticipated to generate hazardous conditions. The low temperature rise and low exposure to radiant heat energy is due to the required and proposed features of the planned new buildings described in Section 3.1 above and summarized below.

- **Type II 1-hour Construction:** This type of construction does not permit structural elements to consist of combustible construction materials. The exterior walls of the building are CMU and limestone. These noncombustible materials reduce the ability of a fire at the hazardous pipeline from spreading to the new additions, the Ancillary Building, or the Wing D patient rooms.
- **Exterior Wall Construction:** Although not required by UBC Table 5-A, the south exterior walls facing the hazardous pipeline have been designed as fire resistance rated exterior walls. The south wall of the Ancillary Building has been designed as a 2-hour fire-resistance rated assembly and the south wall of Wing D has been designed as a 1-hour fire-resistance rated assembly.
- **Fire Separation Distance:** The minimum distance between the hazardous pipeline and the new building additions is 200 feet (i.e., to the new therapy pool in the Ancillary Building). This separation distance reduces the heat transfer through radiant heat energy from a pipeline fire.
- **Geographical Separation:** The hazardous pipeline is located at an elevation below the new additions to the Ancillary Building and Wing D. The change in elevation has an effect on how a fire at the pipeline would "see" the new therapy pool and Wing D patient rooms. The change in elevation also prevents a leak in the pipeline from draining towards the new buildings, which would create a larger hazard.
- **Radiant Heat Barriers:** The windows in Wing D facing the hazardous pipeline location are specified to resist the passage of radiant heat. These windows provide an additional barrier to protect the Wing D patients from a hazardous temperature or level of radiant heat in the event of a fire at the pipeline.

Additionally, the Appendix material of NEPA 415, Section A-2.1.5 provides information on minimizing the damage caused by an exposure fire in three (3) ways: physical separation, fire-resistance rated exterior wall construction, and fire suppression systems. As summarized above, the Texas Neurorehab Center incorporates 200 feet of physical separation and 1-hour fire resistance rated construction.

In this regard, it is the opinion of SEC that the fire modeling presented in this report demonstrates that the proposed design will contain a level of life safety to the occupants of the new therapy pool building and Wing D of the Texas Neurorehab Center equivalent to or greater than the minimum requirements specified by City of Austin Code of Ordinances Section 25-2-516(B).