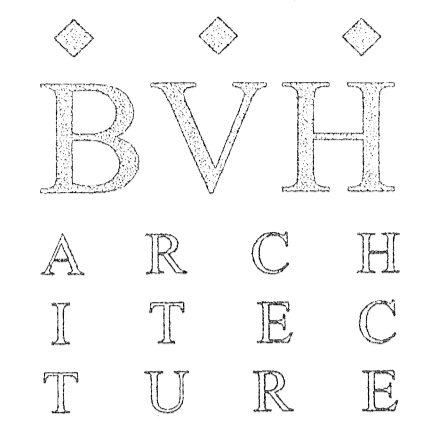


Tunnel From Grand Circus Park Garage To The Kales Building



OWNER:
 Kales Building, LLC
 27087 Gratiot Avenue
 Roseville, Michigan 48066
 Anthony J. Ferlito
 Telephone: 586-779-0400
 Facsimile: 586-779-1188
 Email: tonyf@ferlitoconstruction.com

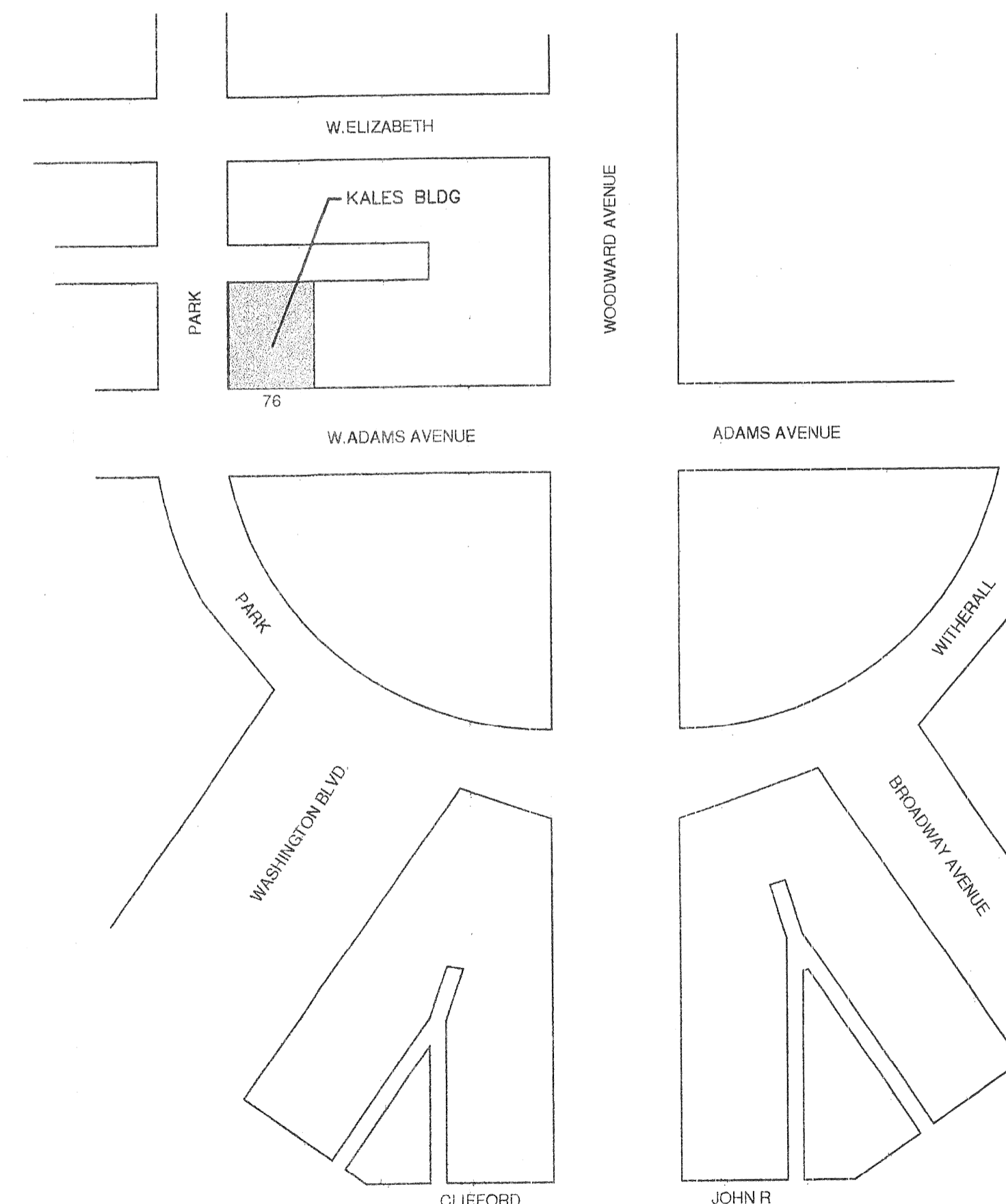
ARCHITECT:
 BVH Architecture, Inc.
 1401 Bagley Street
 Detroit, Michigan 48216
 Brian V. Hurttienne
 Telephone: 313-964-8896
 Facsimile: 313-964-8933
 Email: bh@bvharchitecture.com

CONSTRUCTION MANAGER:
 Mansur Construction Services
 700 Market Tower - 10 West Market St.
 Indianapolis, Indiana 46204
 Micheal Greven
 Telephone: 317-464-8200
 Facsimile: 317-464-8201
 Email: mgreven@mresi.com

Ferlito Construction, Inc.
 27087 Gratiot Avenue
 Roseville, Michigan 48066
 John Gelle
 Telephone: 586-779-0400
 Facsimile: 586-779-1188
 Email: jgelle@ferlitoconstruction.com

DRAWING INDEX

- C1.01 TUNNEL LAYOUT PLAN
- C1.02 TUNNEL LAYOUT SECTIONS
- STRUCTURAL LAYOUT - PLAN/SECTION/CALCULATIONS
- AT-1.1 TUNNEL ENTRY @KALES BLDG - PLANS/SECTIONS
- M1.01 TUNNEL MECHANICAL LAYOUT
- E1.01 TUNNEL ELECTRICAL LAYOUT
- FIRE SUPPRESSION LAYOUT

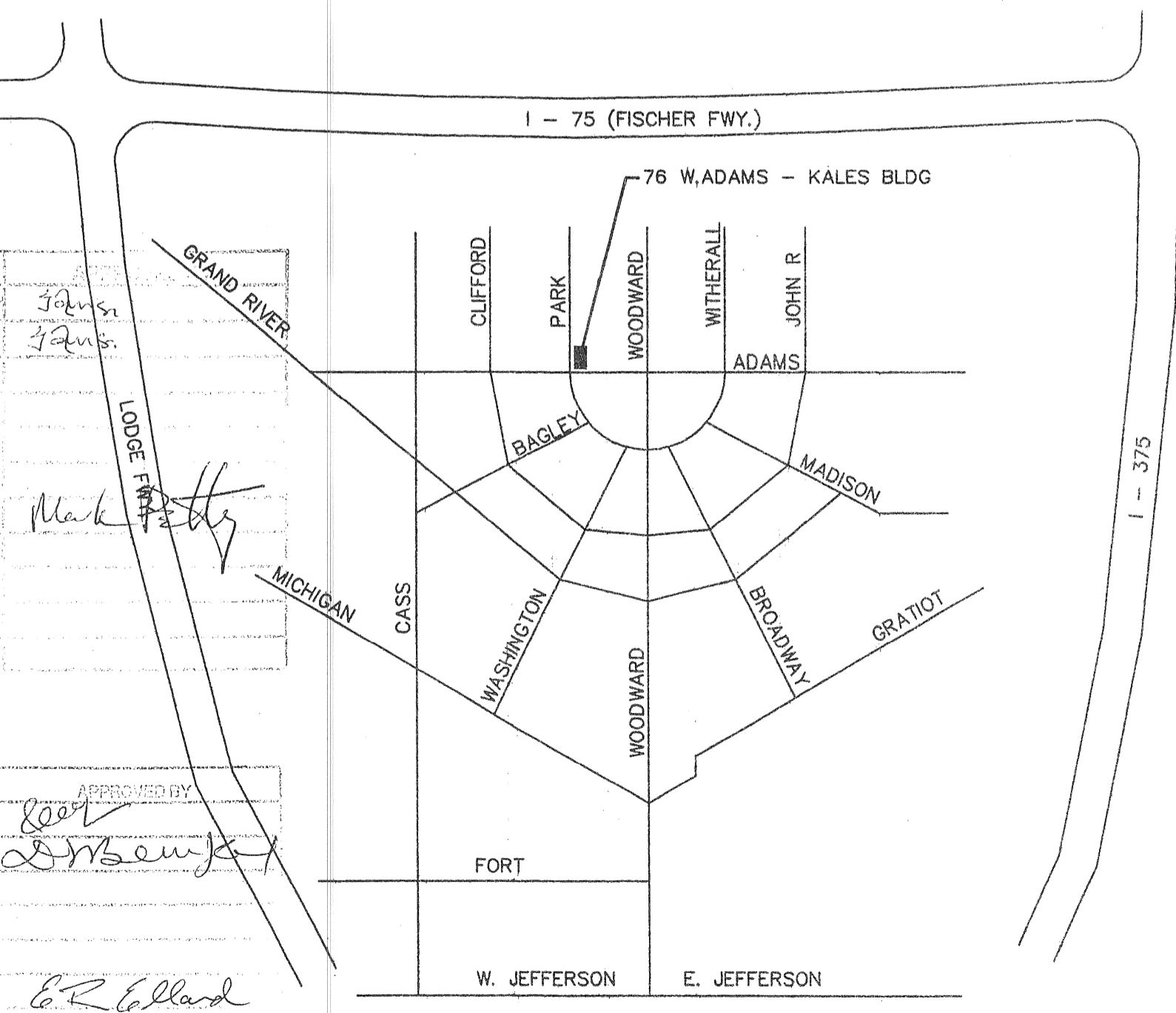


SITE PLAN
 SCALE: 1" = 60'

EXAMINATION	DATE	APPROVED BY
Not involved	3/19/04	John
Not involved	3/19/04	John
	3/18/04	Mark

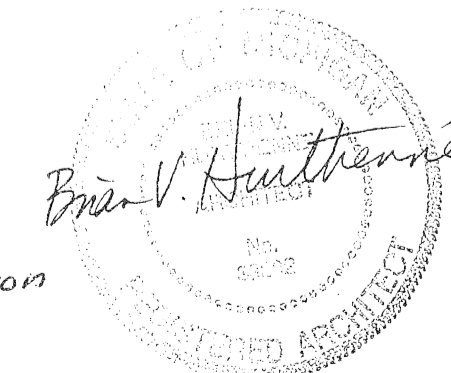
EXAMINATION	DATE	APPROVED BY
ZONING	3/19/04	Root
MECHANICAL ENGINEER	3/19/04	W. Jensen
PLUMBING	3/9/04	E.R. Ballard

DETROIT CITY ENGINEER
 APPROVED
 3/19/04
 Approval is subject to all terms & conditions of City Council Petition #2918, Approved in 2003



SITE LOCATION MAP

STATE OF MICHIGAN	DIVISION	DATE
BARRIER		
ZONING		
STRUCTURAL	003B	3/18/04
SAFETY	626	3/9/04
PLUMBING		
ELECTRICAL		
WILL COMPLY		

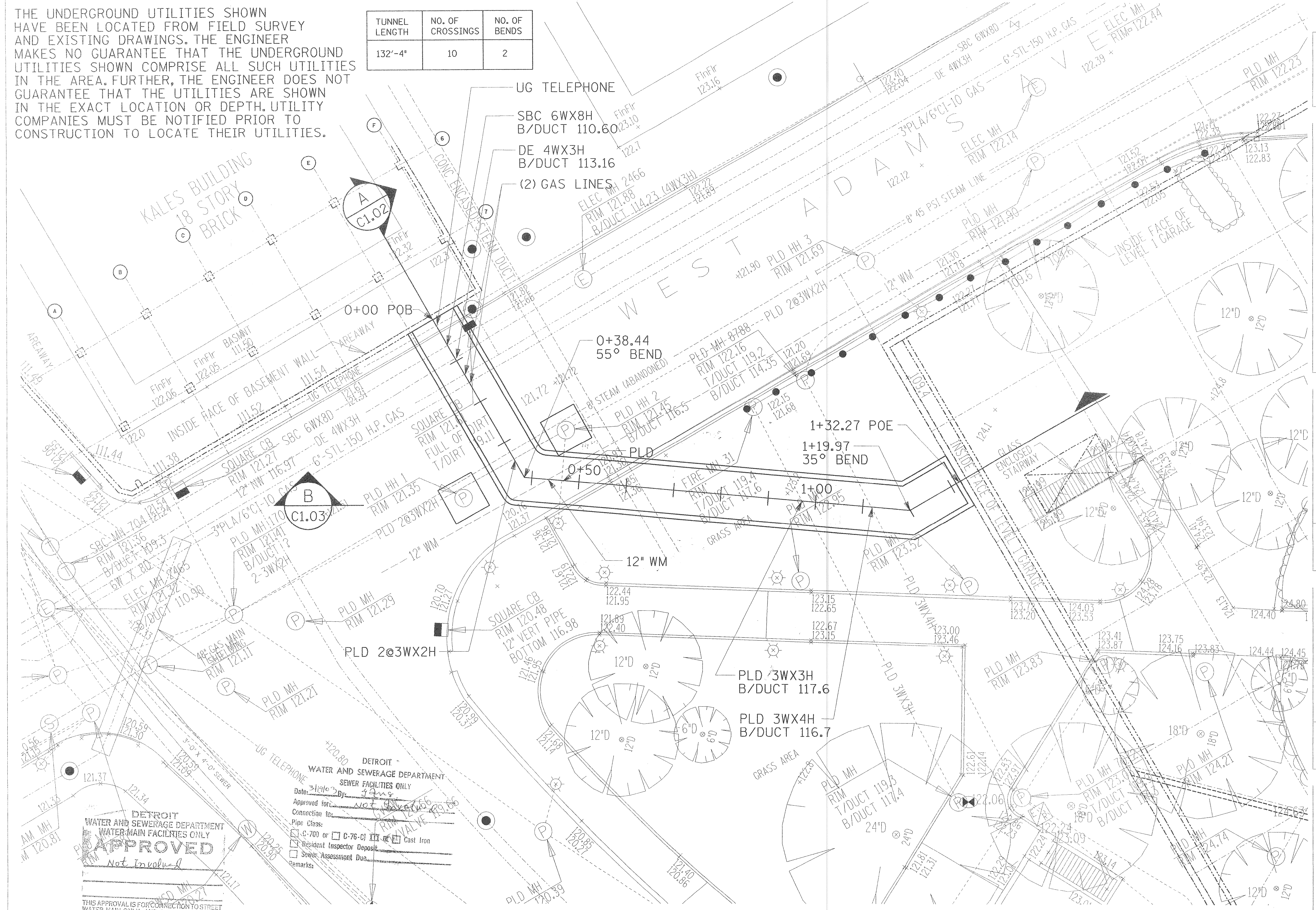


BVH Architecture, Inc.
 1401 Bagley Street
 Detroit, MI 48216
 T: 313-964-8896 F: 313-964-8933
 E: info@bvharchitecture.com

Project/Location
 Kales Building Redevelopment
 76 West Adams
 Detroit, Michigan 48226

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. FURTHER, THE ENGINEER DOES NOT GUARANTEE THAT THE UTILITIES ARE SHOWN IN THE EXACT LOCATION OR DEPTH. UTILITY COMPANIES MUST BE NOTIFIED PRIOR TO CONSTRUCTION TO LOCATE THEIR UTILITIES.

TUNNEL LENGTH	NO. OF CROSSINGS	NO. OF BENDS
132'-4"	10	2

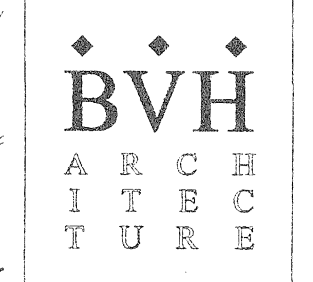
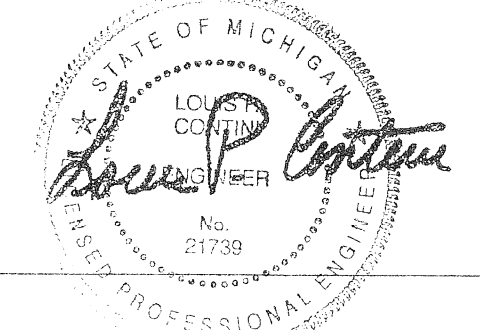


DETROIT WATER AND SEWERAGE DEPARTMENT
APPROVED
 Not involved

THIS APPROVAL IS FOR CONNECTION TO STREET WATER MAIN ONLY, AND SHALL NOT RELIEVE ANY RESPONSIBILITY TO COMPLY WITH ALL THE REQUIREMENTS OF THE WATER SERVICE AND METER APPLICATION BUREAU OF THIS DEPARTMENT.
 BY: *[Signature]* DATE: 3/19/04

DETROIT WATER AND SEWERAGE DEPARTMENT
 SEWER FACILITIES ONLY
 Date: 3/19/04 By: *[Signature]*
 Approved for: *[Signature]*
 Connection to: *[Signature]*
 Pipe Class: C-709 or C-76-CI Cast Iron
 Resident Inspector Deposit
 Sewer Assessment Due
 Remarks:

TUNNEL LAYOUT - PLAN
 SCALE: 1"=20'-0"



BVH Architecture, Inc.
 1401 Bagley Street
 Detroit, MI 48216
 T: 313-964-8888 F: 313-964-8930
 E: info@bvharchitecture.com

ASSOCIATES, INC. ARCHITECTS & ENGINEERS
 60 WEST FORT STREET
 DETROIT, MICHIGAN 48226
 313.965.2300 fax: 313.962.4269
 www.assassociates.com

Project/Location
 Kales Building Redevelopment
 76 West Adams
 Detroit, Michigan 48226

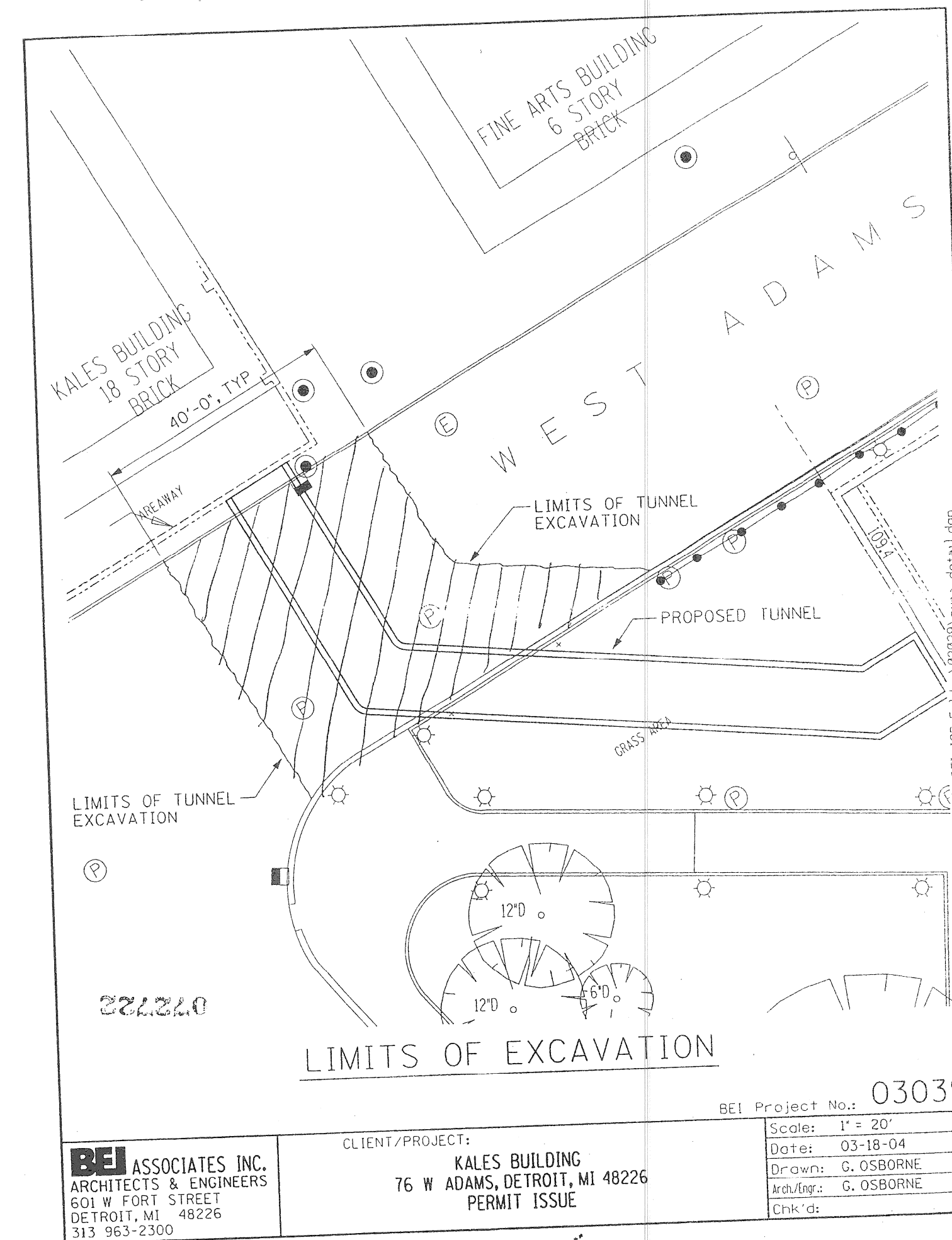
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Sheet Description

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Bidding	<input type="checkbox"/>
Const.	<input type="checkbox"/>
Permit	<input checked="" type="checkbox"/>
Revision	<input type="checkbox"/>

Job No.: 03039
 Drawn by: CD
 Reviewed: LC
 Approved: LC

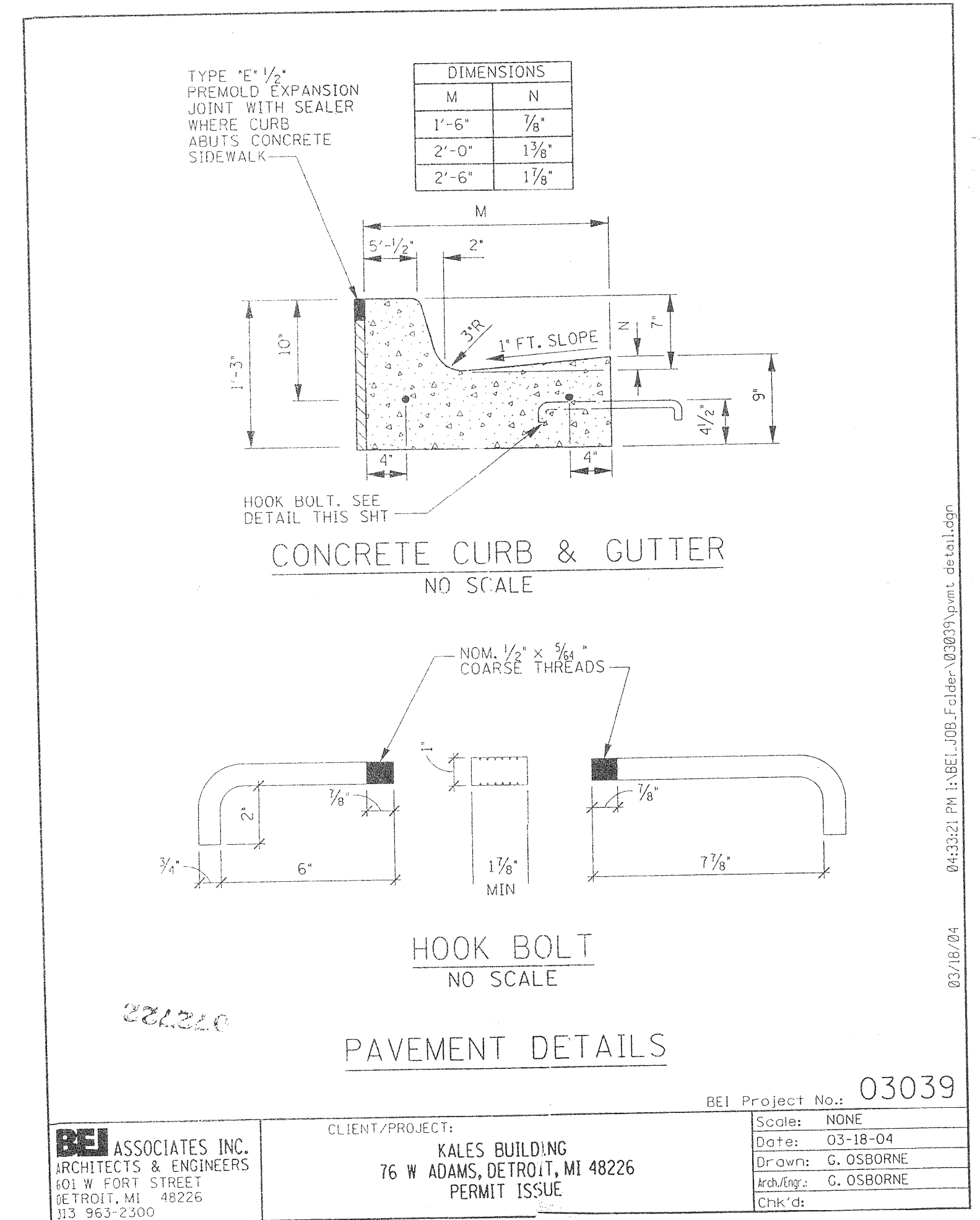
Sheet No.
C1.01



BEI ASSOCIATES INC. ARCHITECTS & ENGINEERS
 601 W FORT STREET
 DETROIT, MI 48226
 313 963-2300

CLIENT/PROJECT: KALES BUILDING
 76 W ADAMS, DETROIT, MI 48226
 PERMIT ISSUE

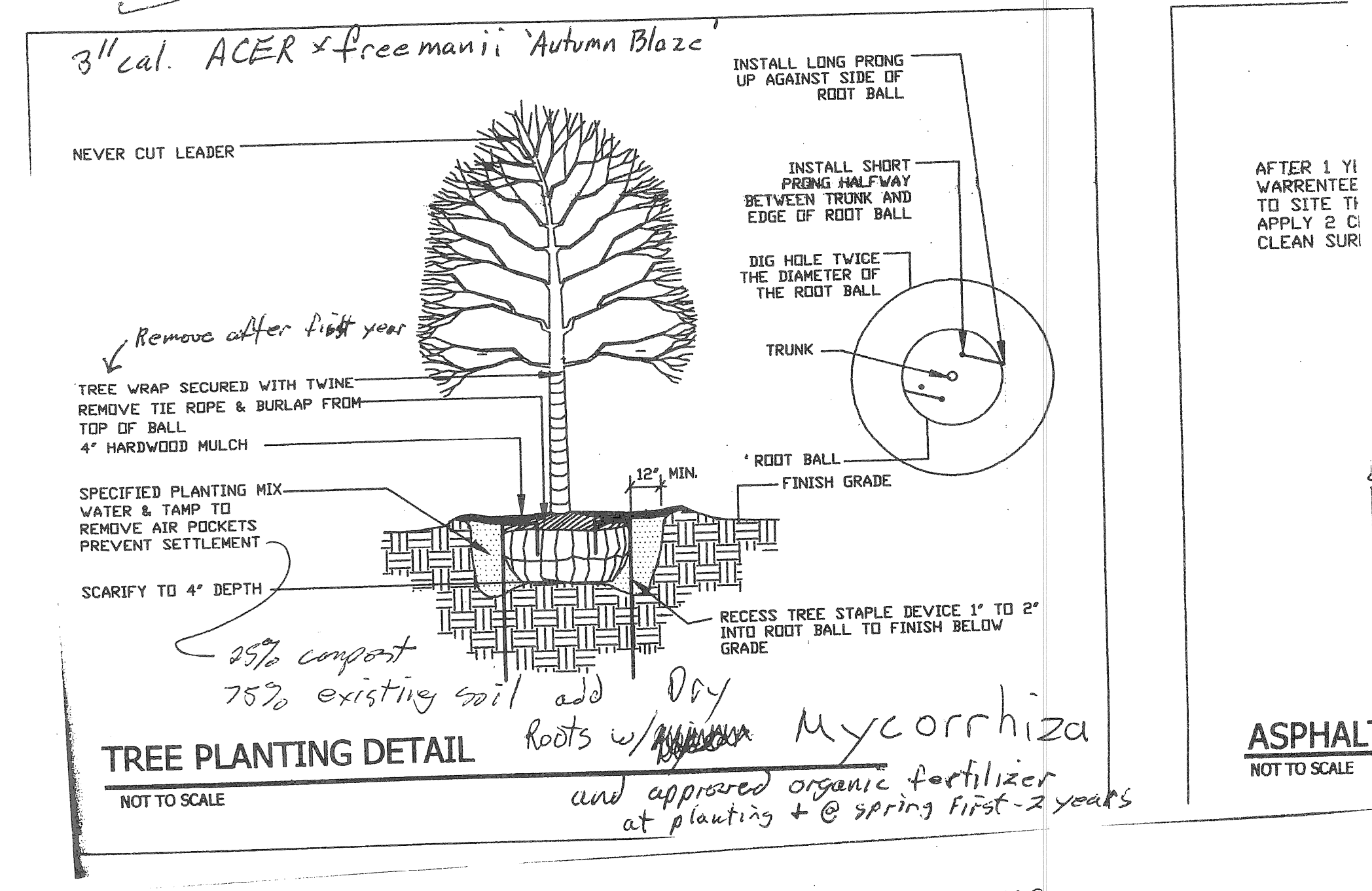
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 Drawn: G. OSBORNE
 In Charge: G. OSBORNE
 Chk'd:



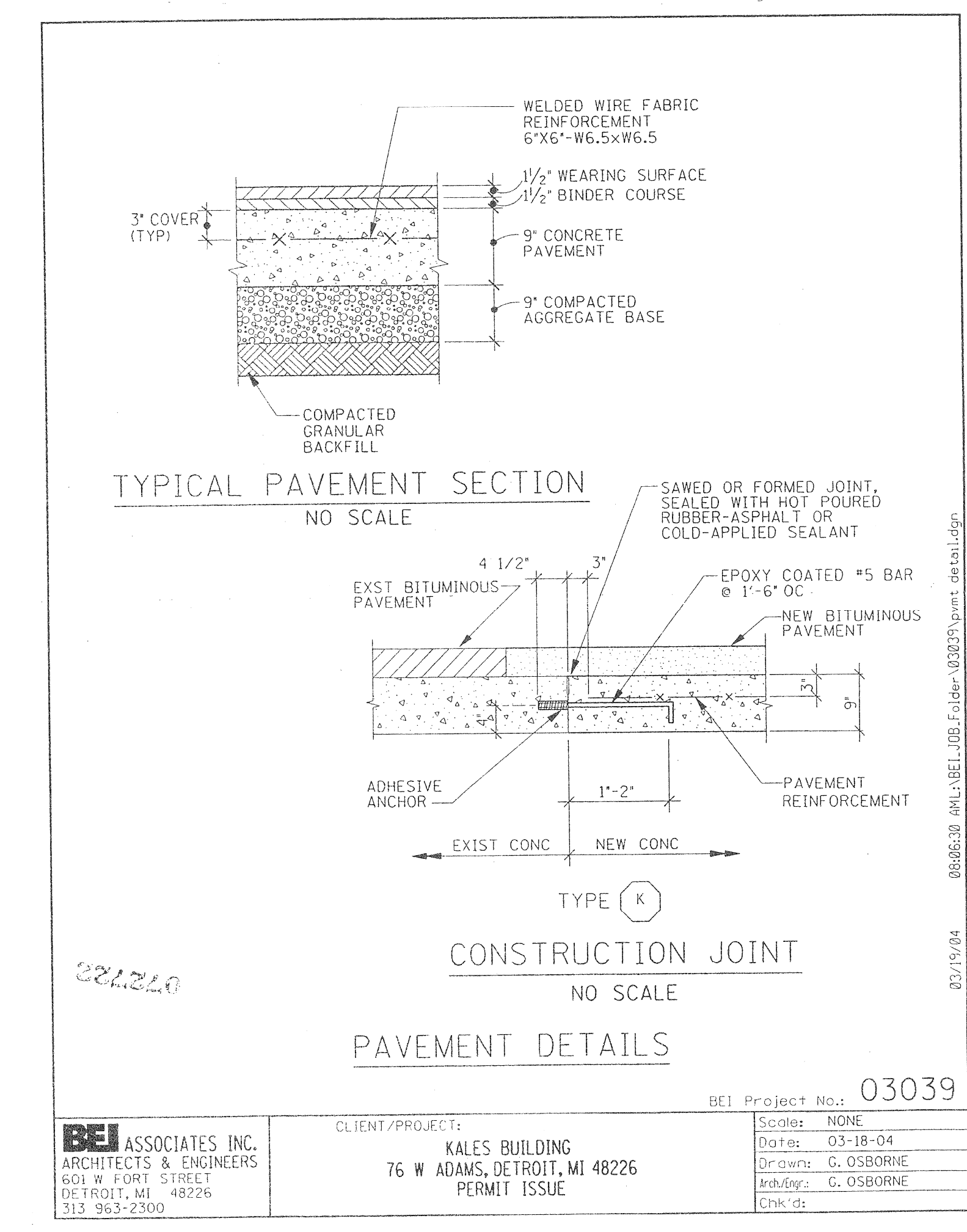
BEI ASSOCIATES INC. ARCHITECTS & ENGINEERS
 601 W FORT STREET
 DETROIT, MI 48226
 313 963-2300

CLIENT/PROJECT: KALES BUILDING
 76 W ADAMS, DETROIT, MI 48226
 PERMIT ISSUE

Scale: NONE
 Date: 03-18-04
 Drawn: G. OSBORNE
 In Charge: G. OSBORNE
 Chk'd:



ASPHALT NOT TO SCALE



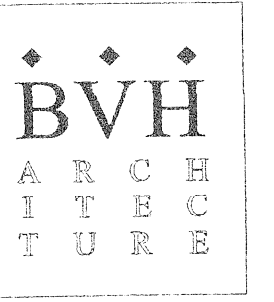
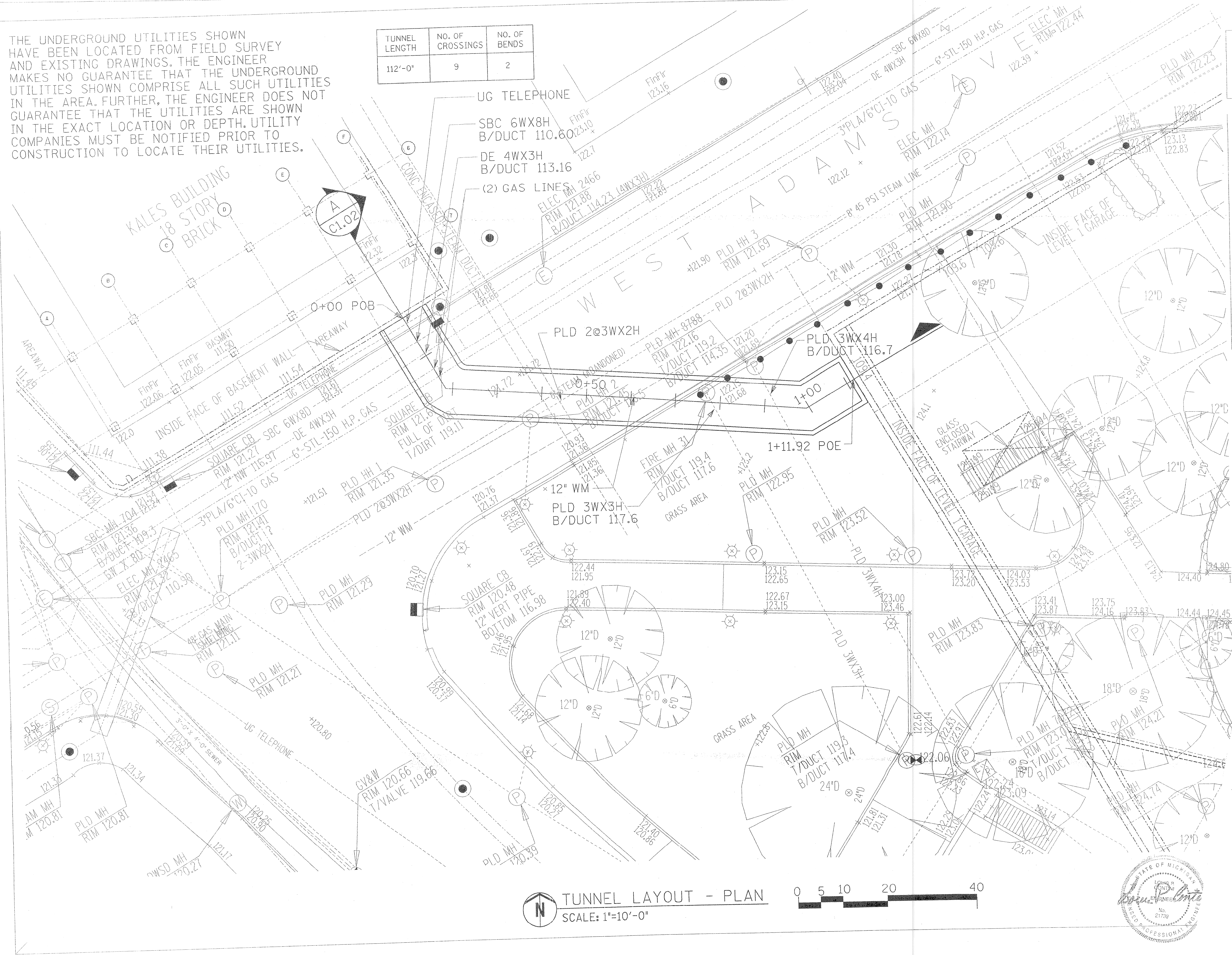
BEI ASSOCIATES INC. ARCHITECTS & ENGINEERS
 601 W FORT STREET
 DETROIT, MI 48226
 313 963-2300

CLIENT/PROJECT: KALES BUILDING
 76 W ADAMS, DETROIT, MI 48226
 PERMIT ISSUE

Scale: NONE
 Date: 03-18-04
 Drawn: G. OSBORNE
 In Charge: G. OSBORNE
 Chk'd:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. FURTHER, THE ENGINEER DOES NOT GUARANTEE THAT THE UTILITIES ARE SHOWN IN THE EXACT LOCATION OR DEPTH. UTILITY COMPANIES MUST BE NOTIFIED PRIOR TO CONSTRUCTION TO LOCATE THEIR UTILITIES.

TUNNEL LENGTH	NO. OF CROSSINGS	NO. OF BENDS
112'-0"	9	2

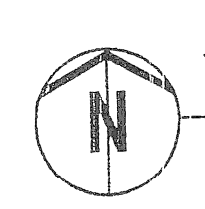


BVH Architecture, Inc.
1401 Bagley Street
Detroit, MI 48216
T: 313-556-8000 F: 313-556-8001
E: info@bvharchitect.com

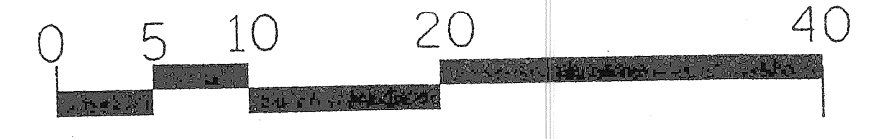
ASSOCIATES, INC.
ARCHITECTS & ENGINEERS
601 WEST FORT STREET
DETROIT, MICHIGAN 48226
313.863.2200 fax: 313.956.4939
www.associatesinc.com

Project/Location
Kales Building Redevelopment
76 West Adams
Detroit, Michigan 48226

TUNNEL LAYOUT - PLAN



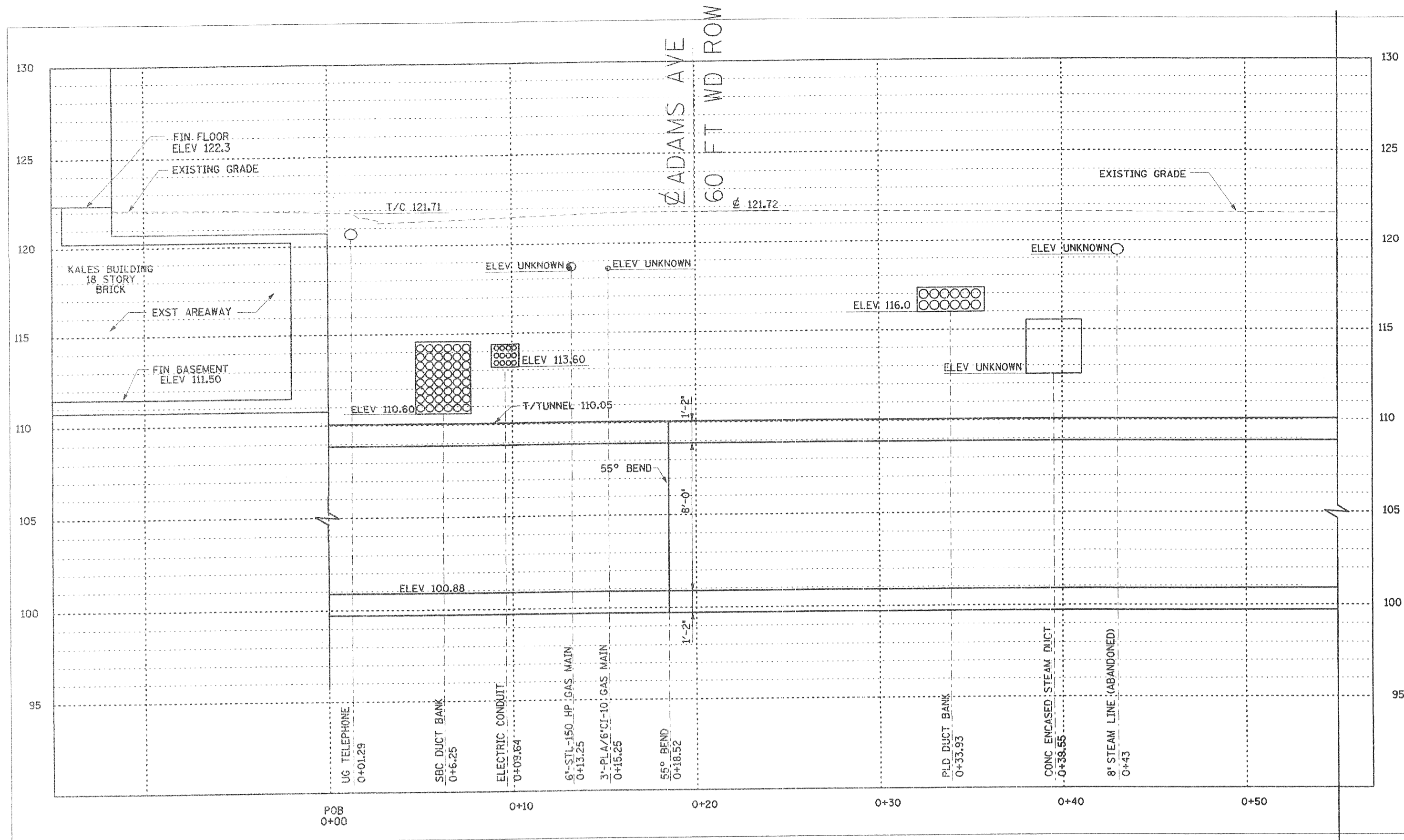
TUNNEL LAYOUT - PLAN
SCALE: 1"=10'-0"



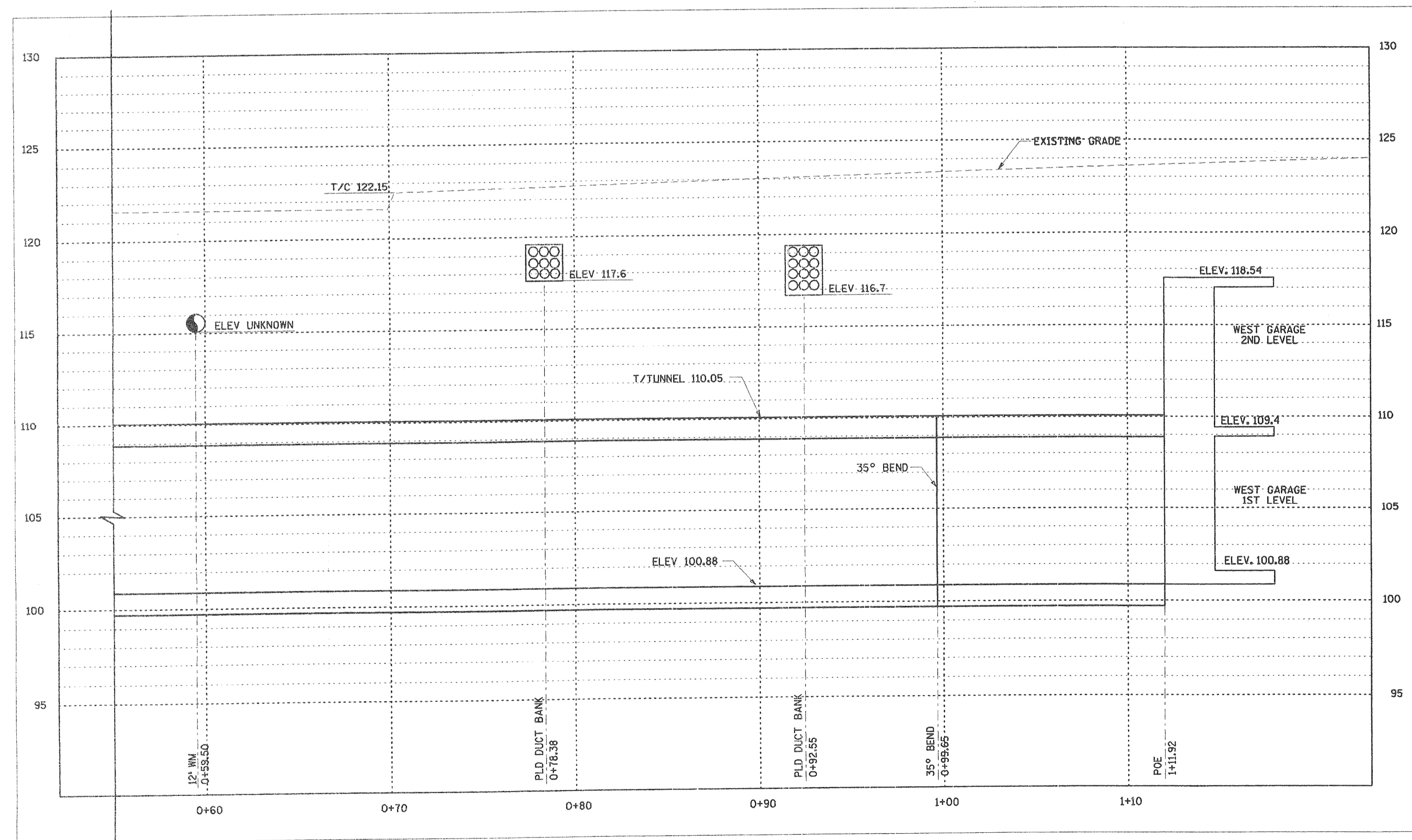
VOID
3/9/04

NOTE: Final drawings are to be used only for the project for which they are prepared. Any use of these drawings for any other project without the written consent of the engineer is prohibited. The engineer is not responsible for any errors or omissions in these drawings.

DATE: _____
BY: _____
TITLE: _____

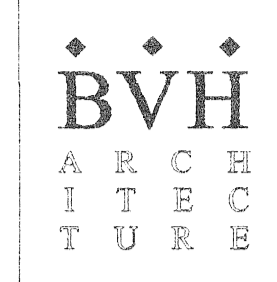
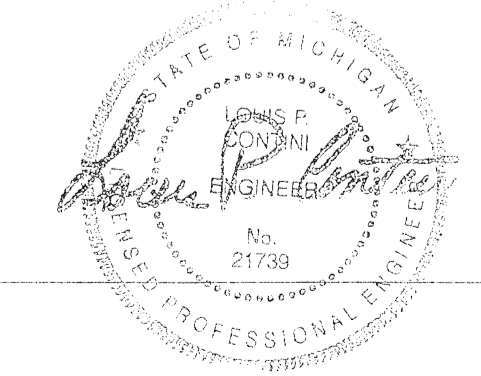


A POB TO STA 0+55.00
C1.01



A STA 0+55.00 TO POE
C1.01

TUNNEL LAYOUT - SECTIONS
SCALE: 1"=5'-0"



BVH Architecture, Inc.
1401 Bagley Street
Detroit, MI 48216
P: 313-564-8800 F: 313-564-8800
E: info@bvhart.com

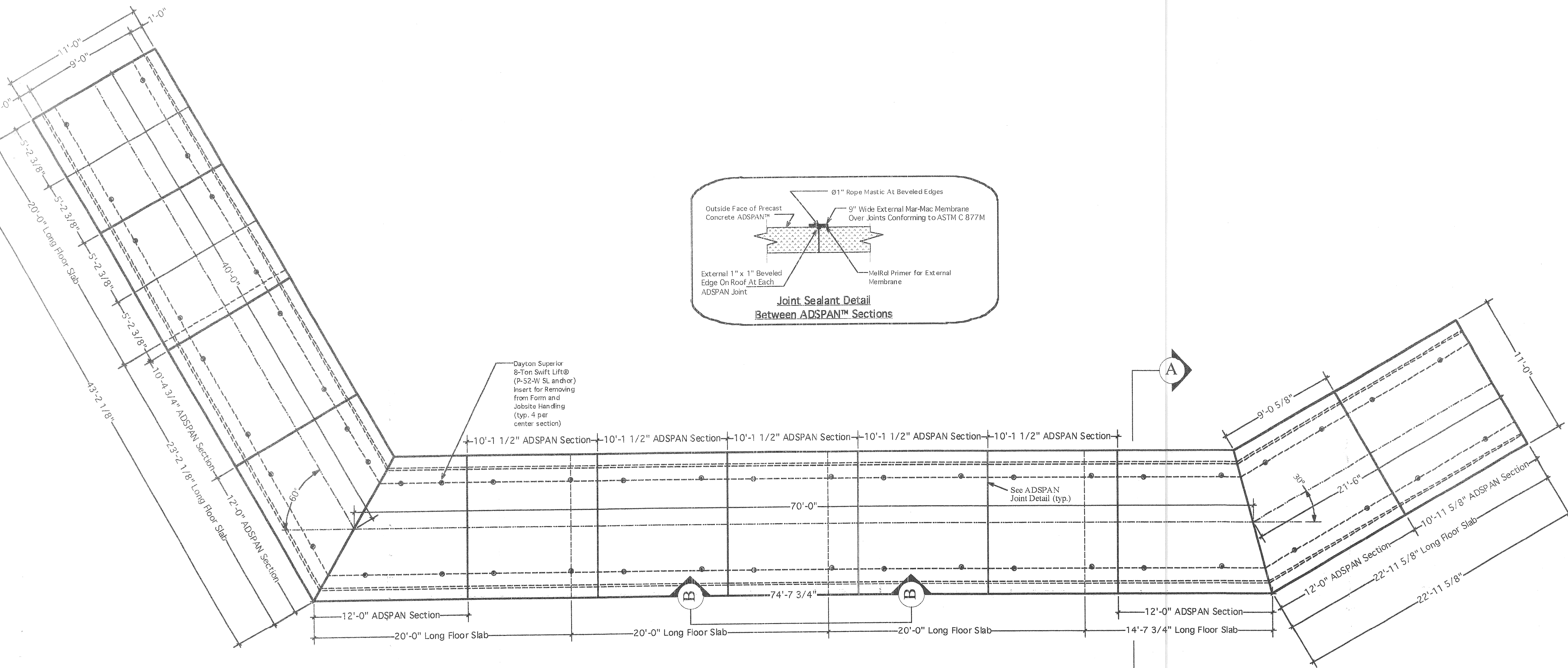
ASSOCIATES, INC.
ARCHITECTS & ENGINEERS
601 WEST FORT STREET
DETROIT, MICHIGAN 48226
313.963.2300 fax 313.962.6289
www.bvhasociates.com

Project/Location
Kales Building Redevelopment
76 West Adams
Detroit, Michigan 48226

Sheet Description
TUNNEL LAYOUT - SECTIONS

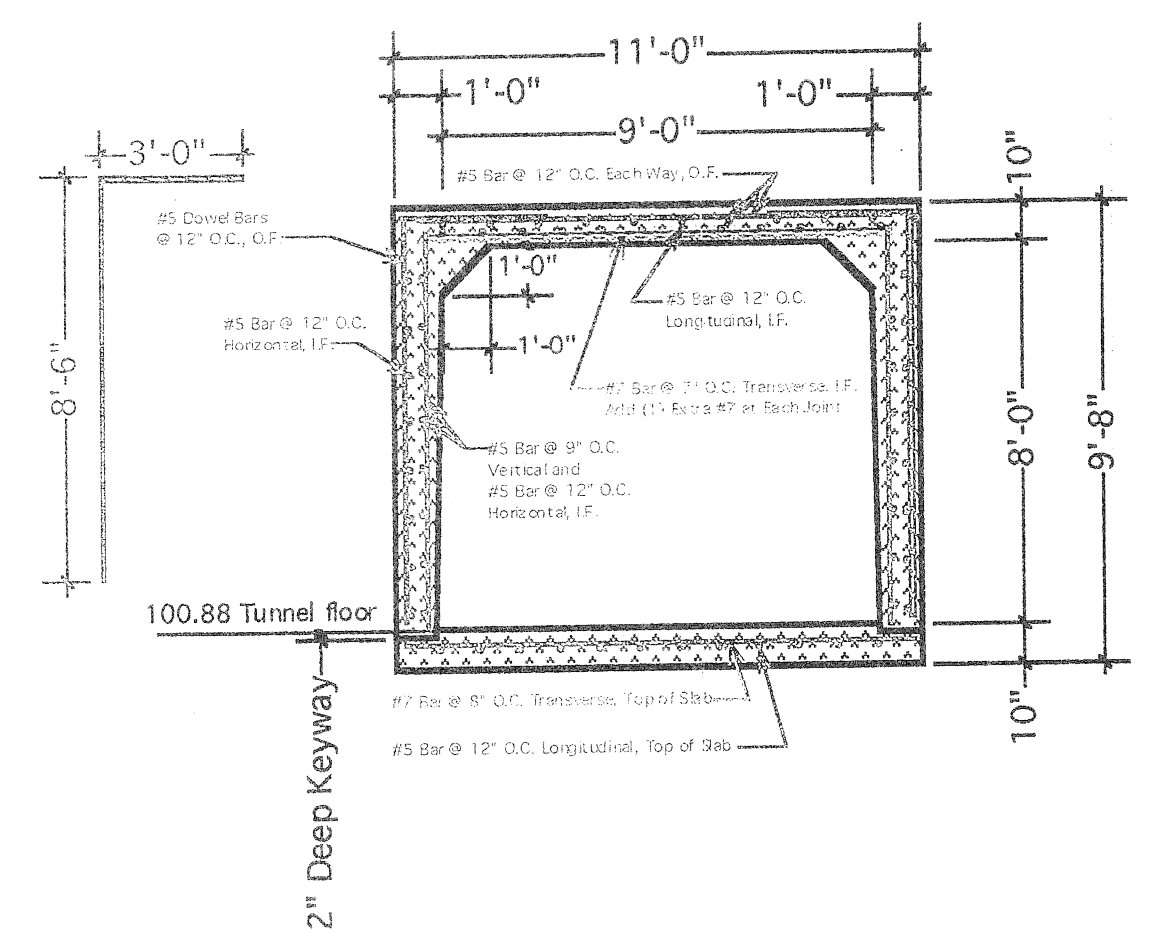
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Project: Kales Building Redevelopment
Approved: LC
Revision: 01-22-14

Sheet No.: C1.02



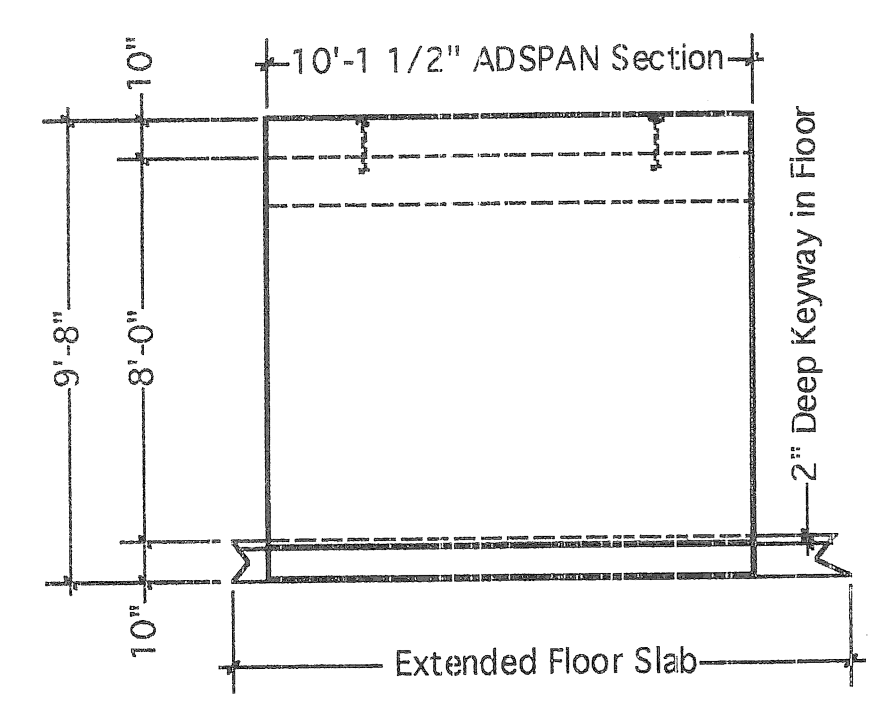
121.45 Adams Street Elev.

PLAN VIEW
1/4" = 1'-0"



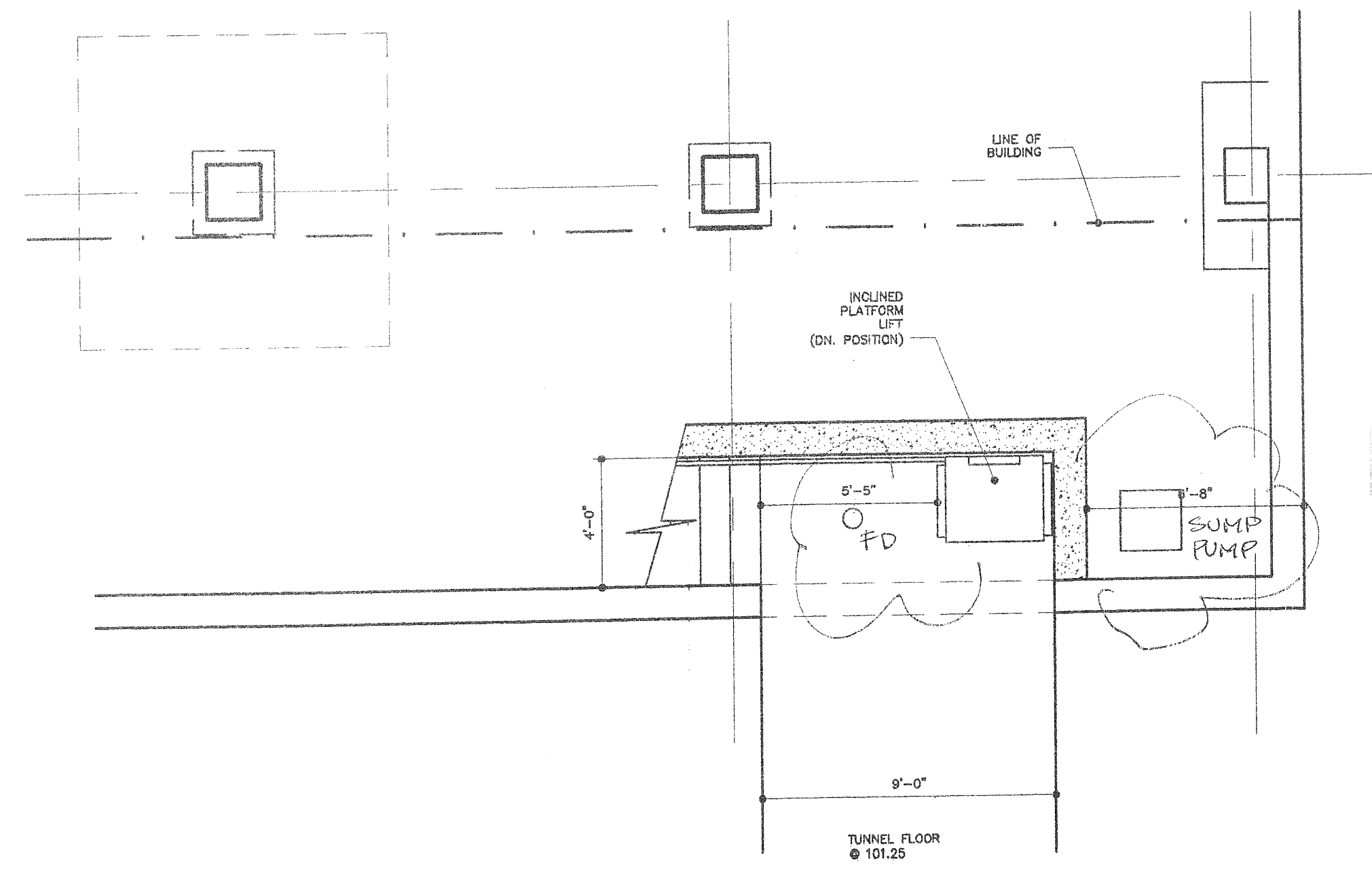
A-A SECTION VIEW w/Typical Reinforcement
Scale: 1/4" = 1'-0"

Heaviest ADSPAN Section Weighs Approx. 46,000 lbs.
Heaviest Floor Slab Weighs Approx.

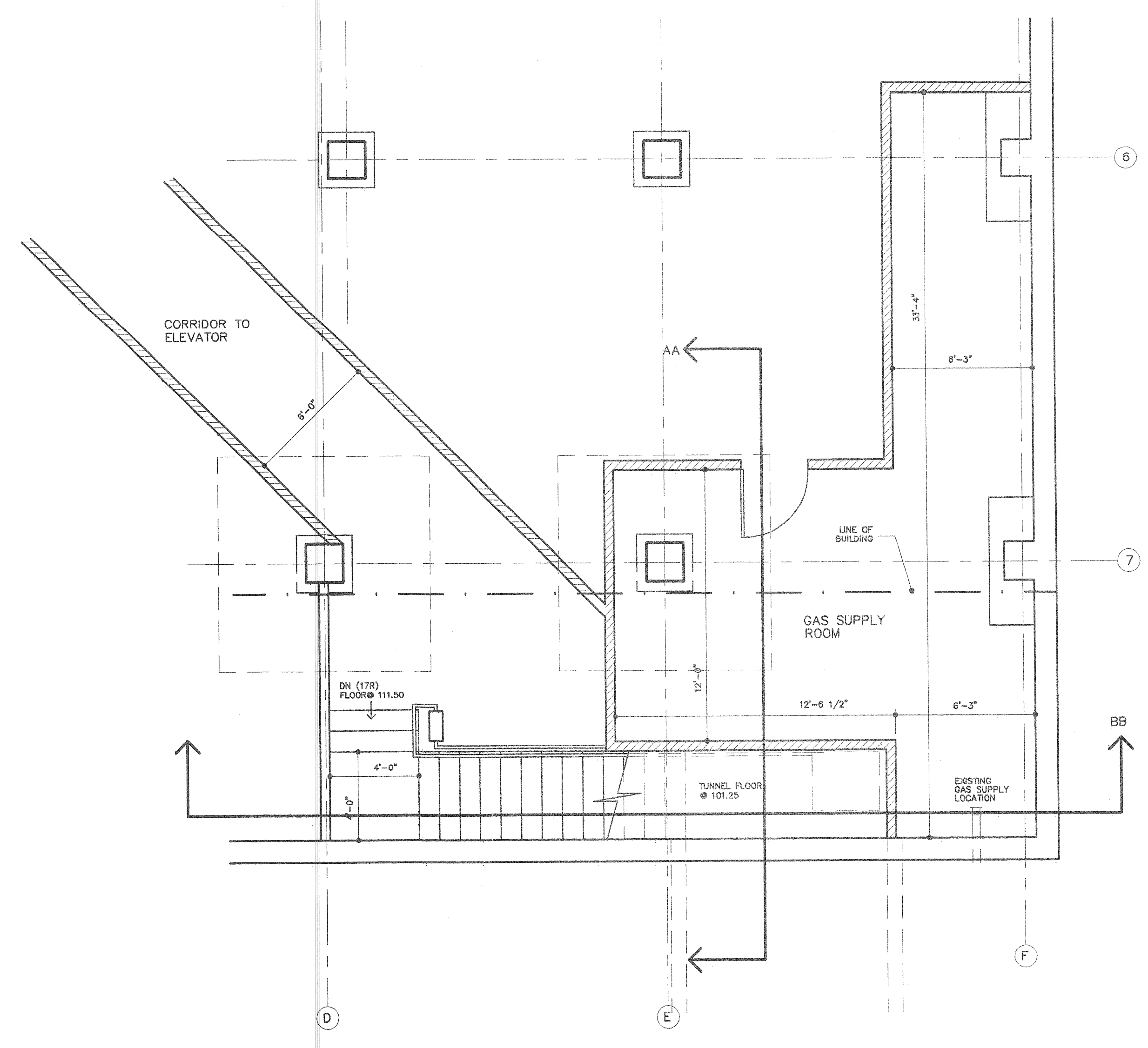


B-B SIDE VIEW of Typical Section
Scale: 1/4" = 1'-0"

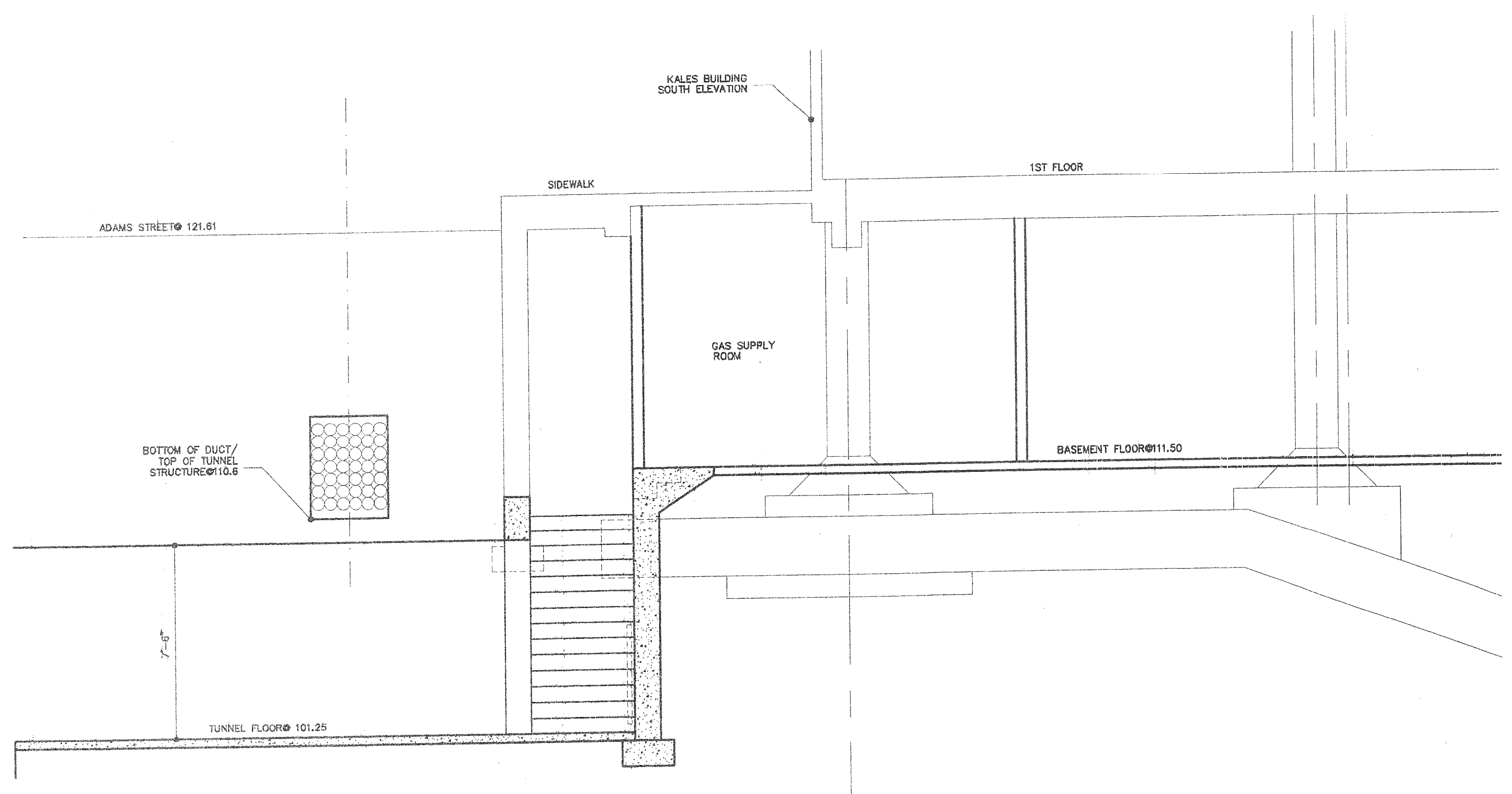
The Kales Building Detroit, MI	
9' Span x 8' Rise ADSPAN™ Utility Tunnel	
Concrete Strength: 5000 PSI @ 28 Days	Original Submittal: 1/14/04 LS
Air Content: 6.5 ± 1.5%	Revised Submittal: 2/12/04 KS
Reinforcement: ASTM A615 Grade 60 Rebar HS-20 Highway Loading	
1 1/2" Concrete Cover Over Reinforcement (typ.)	
Program: Vectorworks	
See Enclosed Professional Engineer's Structural Calculations	
Date: 2/12/04 Time: 11:54:21 AM Filename: Kales Bldg 9x8 ADSPAN Tunnel	
Advance Concrete Products Co. Highland, MI 48357 (248)887-4173 (800)824-8351 (248)474-6539 FAX (248)887-2755	



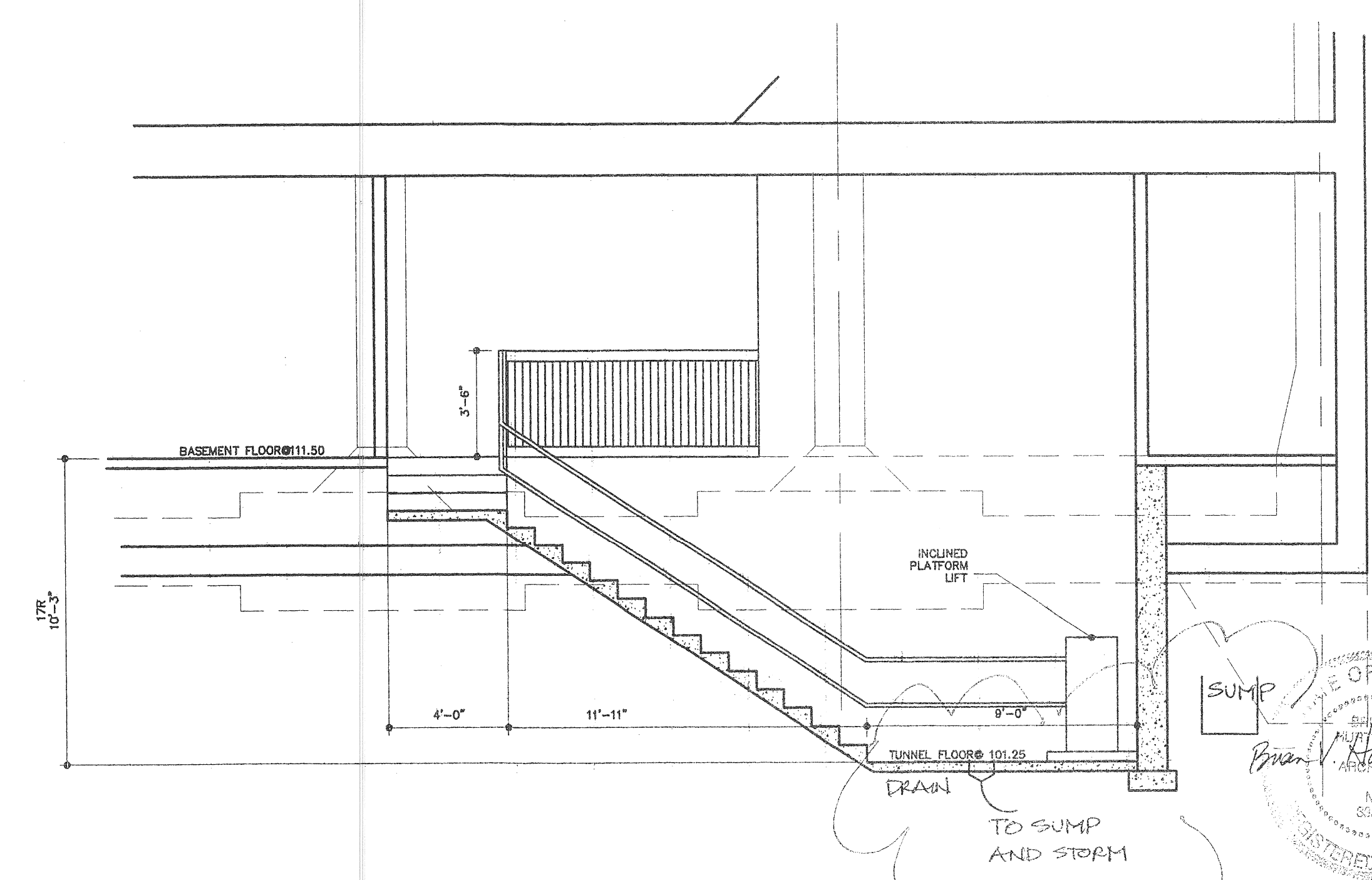
TUNNEL LEVEL FLOOR PLAN
SCALE = 1/4" = 1'-0"



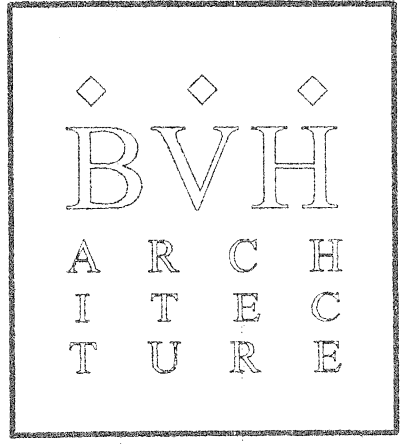
BASEMENT LEVEL FLOOR PLAN
SCALE = 1/4" = 1'-0"



SECTION - AA
SCALE = 1/4" = 1'-0"



SECTION - BB
SCALE = 1/4" = 1'-0"



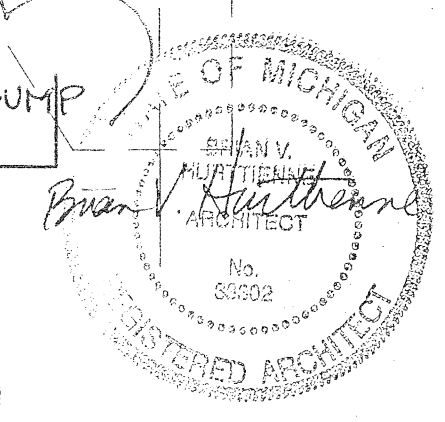
BVH Architecture, Inc.
1401 Bagley Street
Detroit, MI 48216
T: 313-964-8886 F: 313-964-8933
E: info@bvharchitecture.com

Project/Location
Kales Building Redevelopment
76 West Adams
Detroit, Michigan 48226

Sheet Description
TUNNEL ENTRY@KALES BLDG
-PLANS/SECTIONS

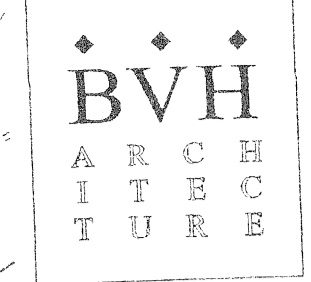
Job No.:	xx
Drawn by:	JR
Reviewed:	BH
Approved:	BH

Sheet No.
AT-1.1



THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. FURTHER, THE ENGINEER DOES NOT GUARANTEE THAT THE UTILITIES ARE SHOWN IN THE EXACT LOCATION OR DEPTH. UTILITY COMPANIES MUST BE NOTIFIED PRIOR TO CONSTRUCTION TO LOCATE THEIR UTILITIES.

TUNNEL LENGTH	NO. OF CROSSINGS	NO. OF BENDS
112'-0"	9	2



BVH Architecture, Inc.
1401 Bagley Street
Detroit, MI 48216
Tel: 313.962.8888
E: info@bvhinc.com

ASSOCIATES, INC. ARCHITECTS & ENGINEERS
601 WEST WOODWARD
Detroit, MI 48226
313.963.2900 Fax: 313.962.4269
www.associatesinc.com

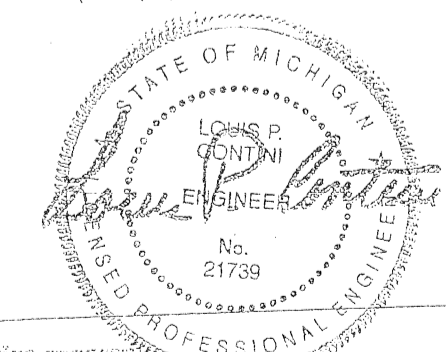
Kales Building Redevelopment
76 West Adams
Detroit, Michigan 48226

MECHANICAL TUNNEL LAYOUT - PLAN

Sheet Description:
 Prelim
 Bidding
 Const.
 Permit
 Revision

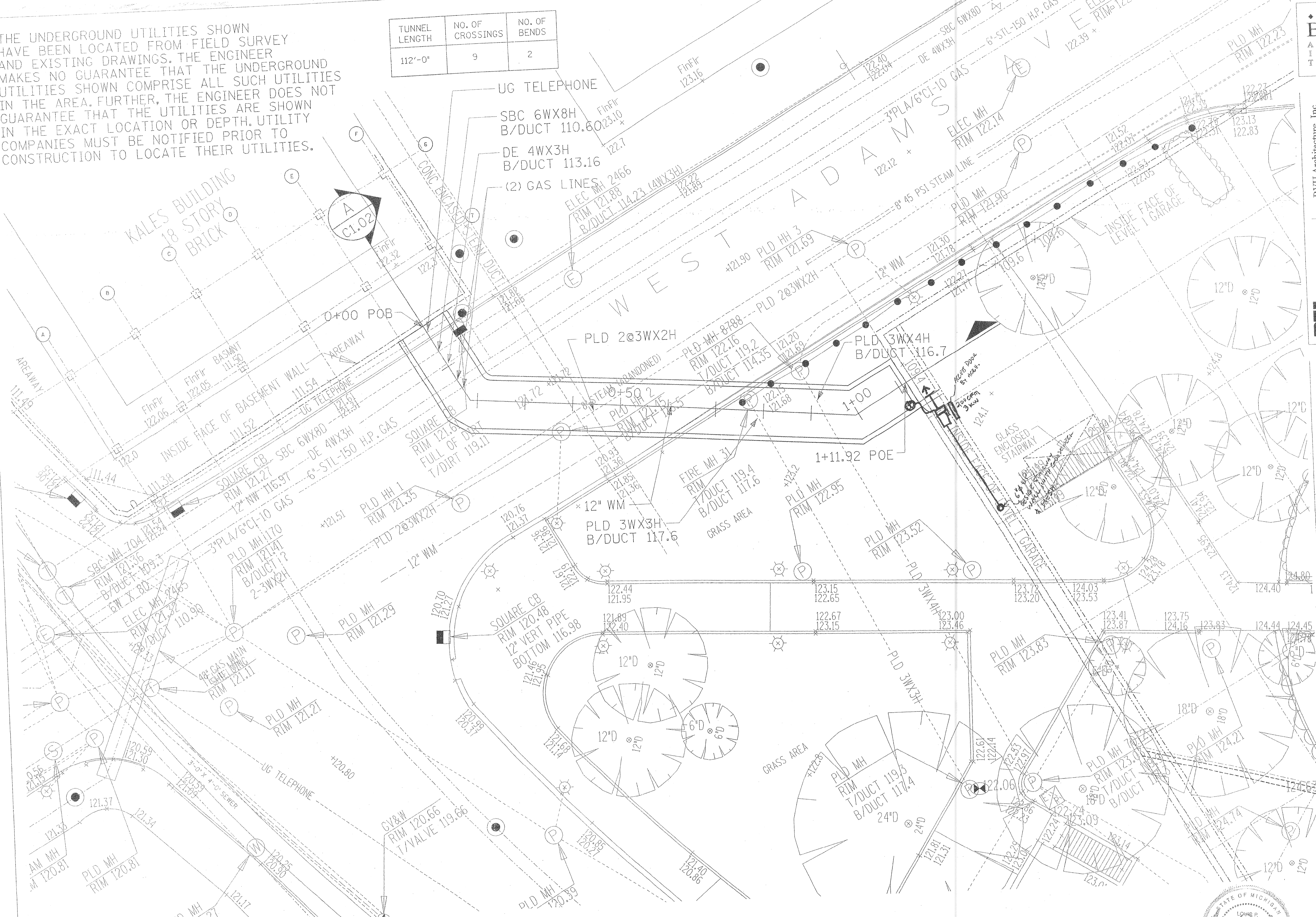
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 Drawn by: CO
 Reviewed: LC
 Approved: LC

Sheet No. **M1.01**

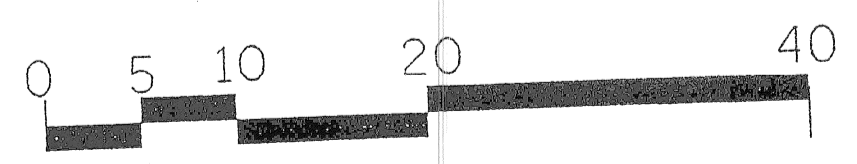


Division of Energy Engineering, sensitive equipment only - Installation of Oil Burners, Gas Boilers, Elevators, Refrigeration Equipment, Storage Tanks and any other equipment, approval of application for installation is not permitted until the applicant has received the necessary permits and approvals from the appropriate agencies.

MECHANICAL VENTILATION AIR REQUIRED

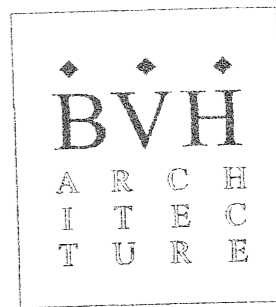


TUNNEL LAYOUT - PLAN
SCALE: 1"=10'-0"



THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. FURTHER, THE ENGINEER DOES NOT GUARANTEE THAT THE UTILITIES ARE SHOWN IN THE EXACT LOCATION OR DEPTH. UTILITY COMPANIES MUST BE NOTIFIED PRIOR TO CONSTRUCTION TO LOCATE THEIR UTILITIES.

TUNNEL LENGTH	NO. OF CROSSINGS	NO. OF BENDS
112'-0"	9	2



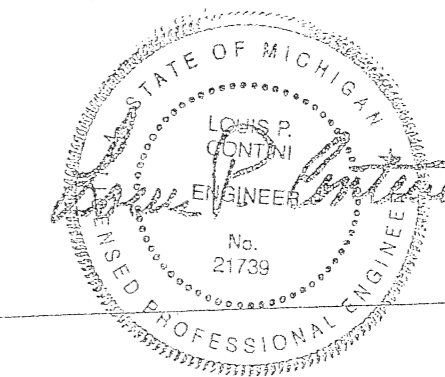
BVH Architecture, Inc.
1401 Bagley Street
Detroit, MI 48216
www.bvharchitecture.com

ASSOCIATES, INC.
ARCHITECTS & ENGINEERS
601 WEST FORT STREET
DETROIT, MICHIGAN 48226
www.associnc.com

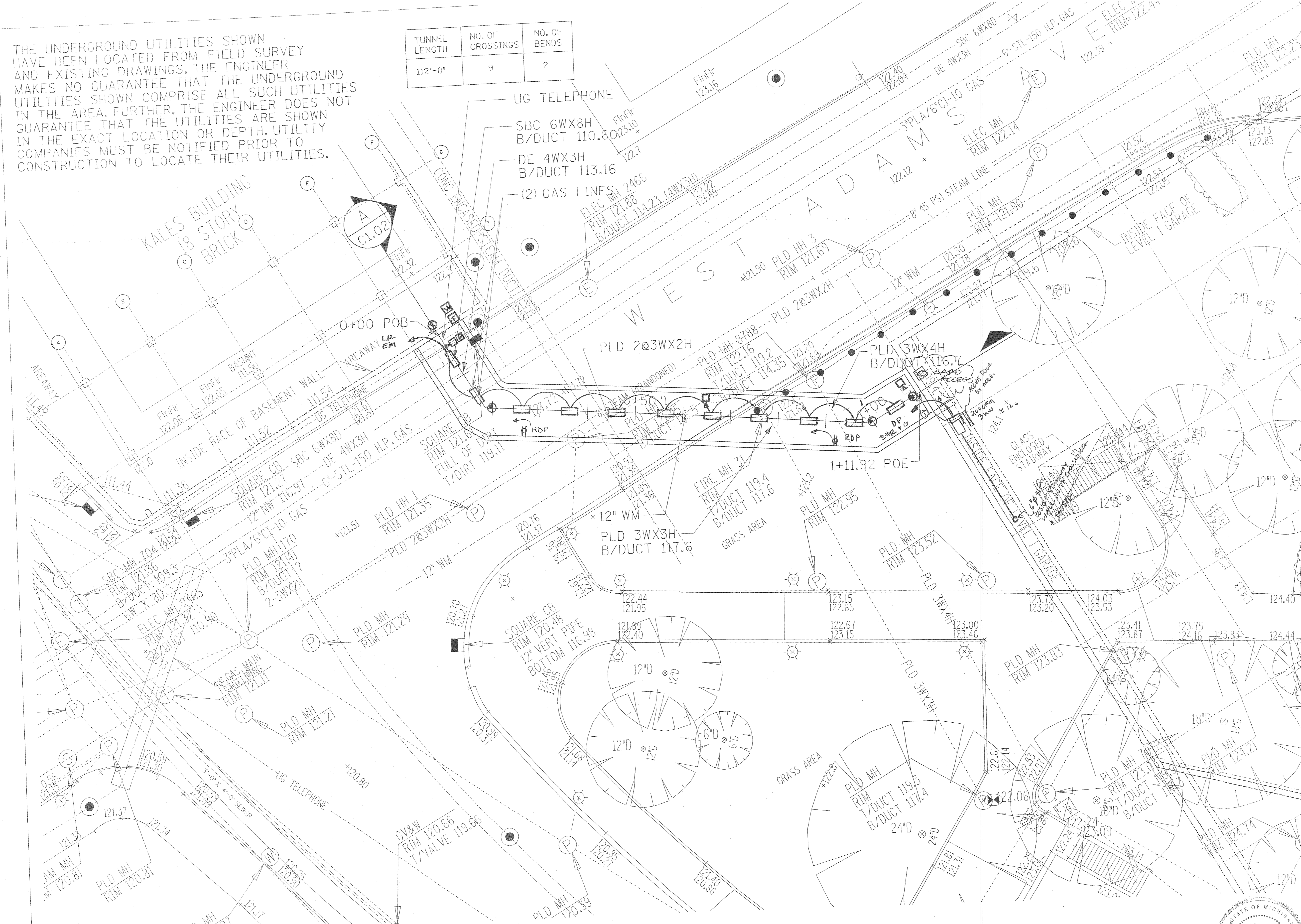
Program Location
Kales Building Redevelopment
76 West Adams
Detroit, Michigan 48226

Sheet Description
ELECTRICAL TUNNEL LAYOUT PLAN

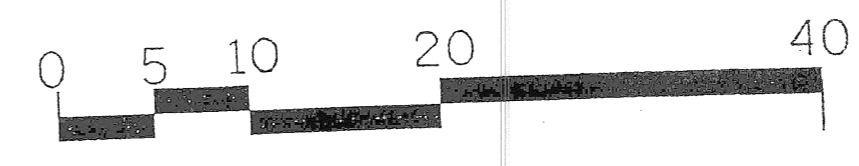
Permit:
 Bidding:
 Contract:
 Review:
 Approval:
 Date: 03/19/19
 Drawn by: CD
 Reviewed by:
 Approved by:
 Sheet No. **E1.01**

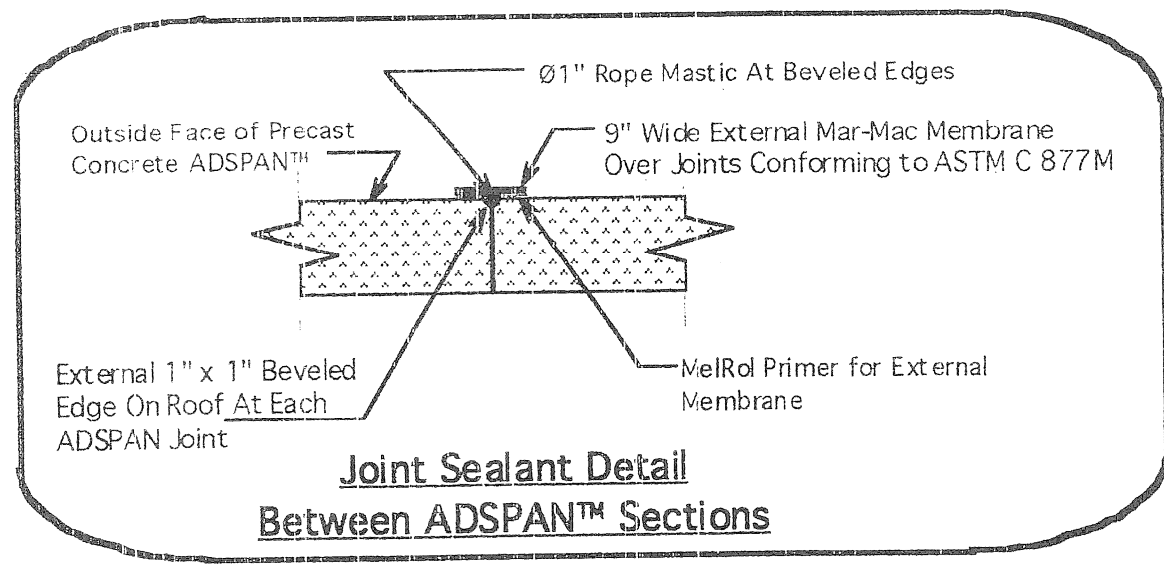
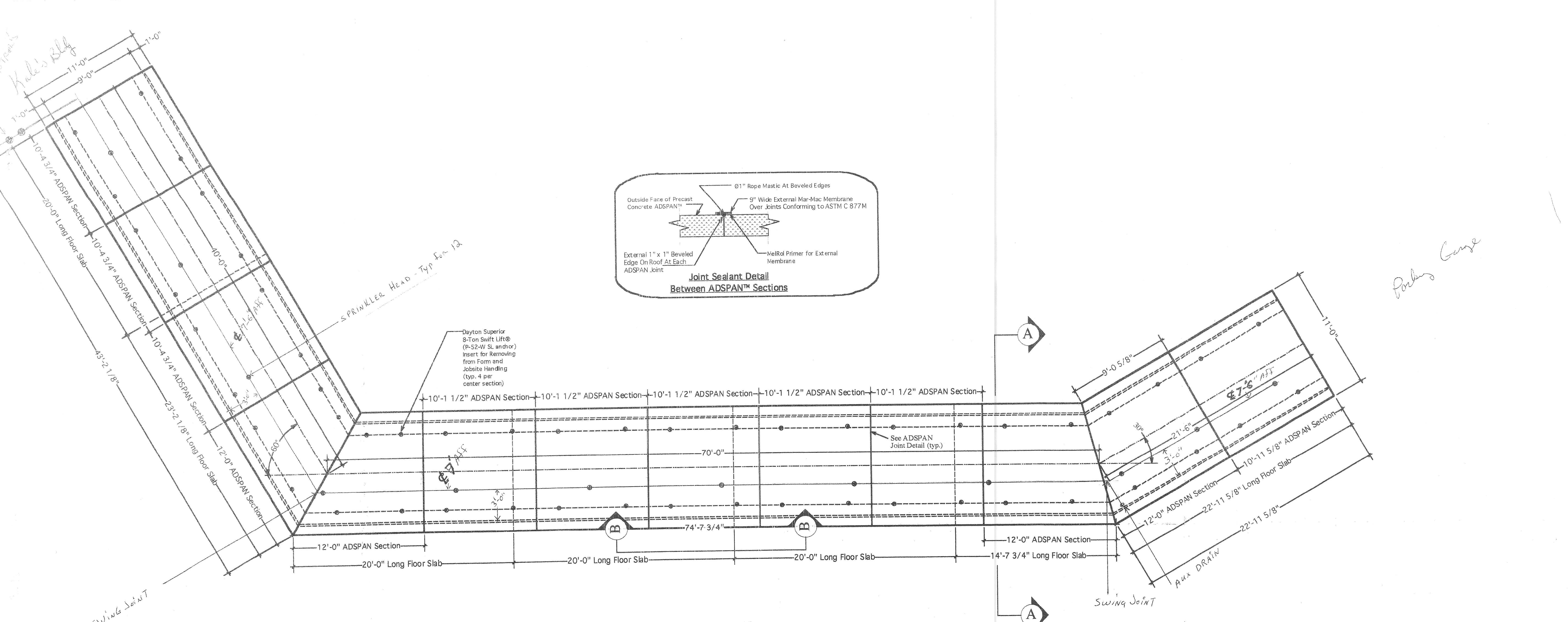


- OUTLET
- 1X4 FLOOR FINISH
- EXIT FIXTURE
- WATER FLOW
- TAMPER
- Pull station
- SPEAKER-STROBE

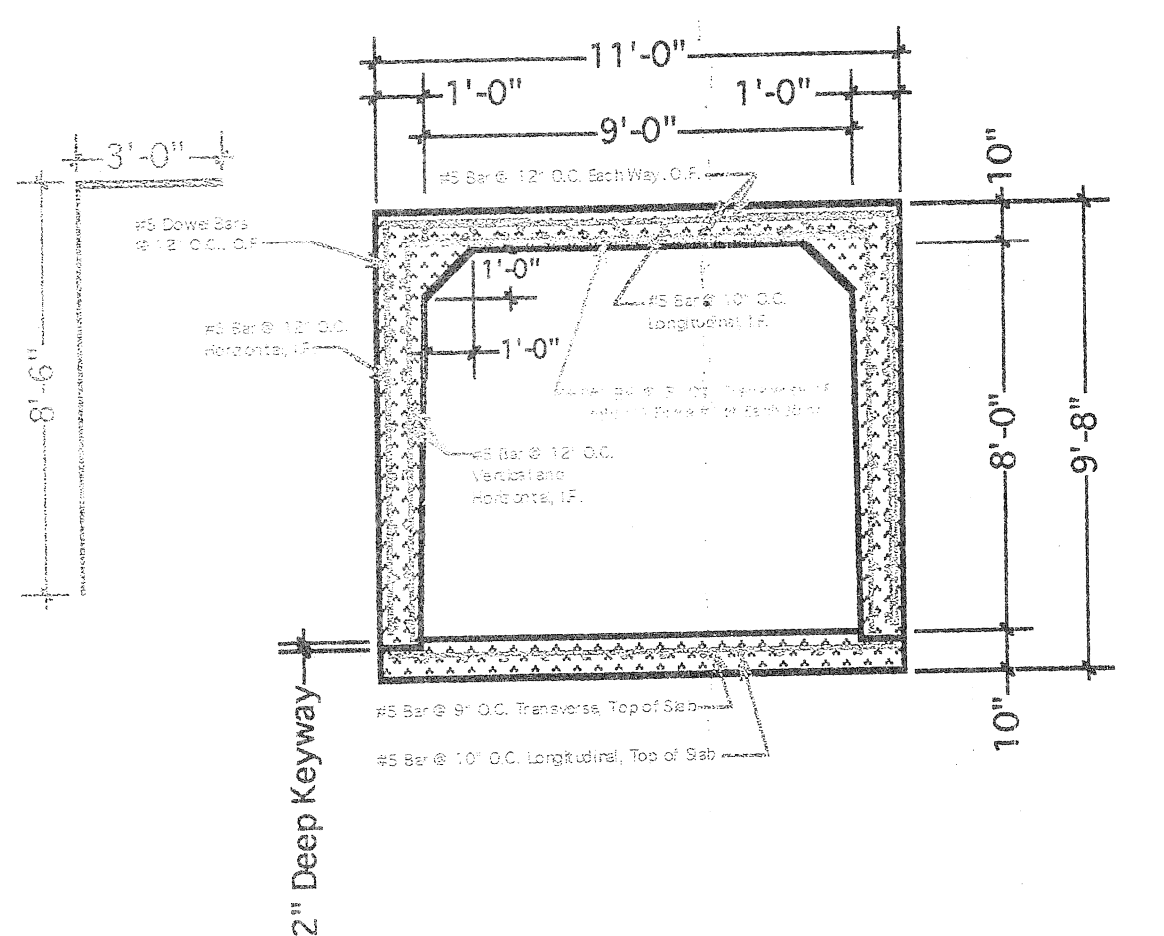


TUNNEL LAYOUT - PLAN
SCALE: 1"=10'-0"



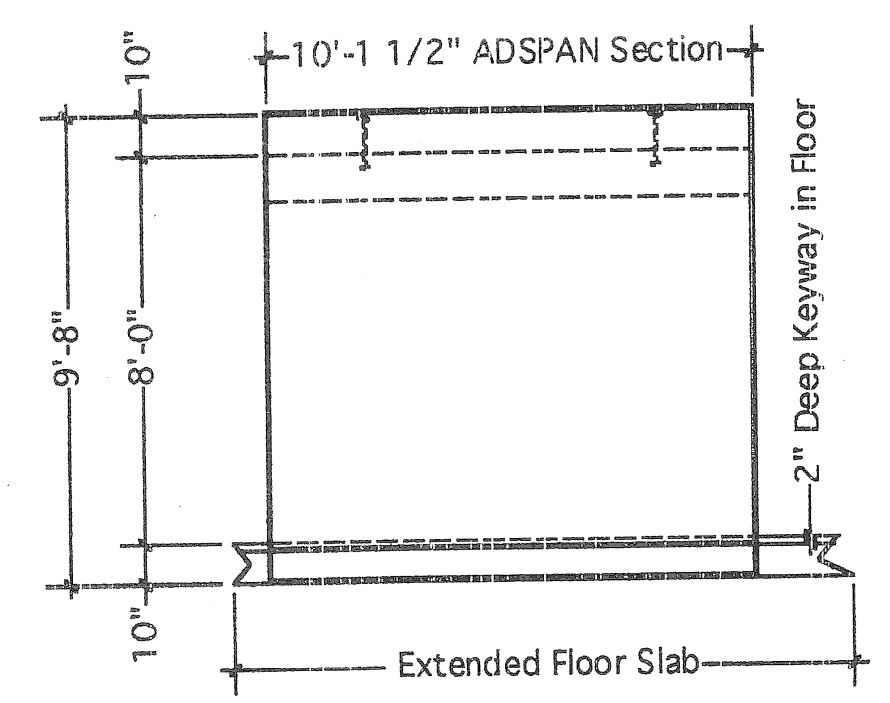


PLAN VIEW
1/4" = 1'-0"



A-A SECTION VIEW w/Typical Reinforcement
Scale: 1/4" = 1'-0"

Heaviest ADSPAN Section Weighs Approx. 46,000 lbs.
Heaviest Floor Slab Weighs Approx.



B-B SIDE VIEW of Typical Section
Scale: 1/4" = 1'-0"

HANGER'S - 3/8" Drop-in

ACE SPRINKLER Co.
CONCEPT. 1-30-04

No Heat in tunnel

Revised 1-28-04 weekly meet

The Kales Building Detroit, MI	
9' Span x 8' Rise ADSPAN™ Utility Tunnel	
Concrete Strength: 5000 PSI @ 28 Days Air Content: 6.5 ± 1.5%	Original Submittal: 1/14/04 LS
Reinforcement: ASTM A615 Grade 60 Rebar HS-20 Highway Loading	
1 1/2" Concrete Cover Over Reinforcement (typ.)	
Program: Vectorworks	
See Enclosed Professional Engineer's Structural Calculations	
Date: 1/14/04 Time: 2:53:27 PM Filename: Kales Bldg 9x8 ADSPAN Tunnel	
NPCA CERTIFIED PLANT	
Advance Concrete Products Co. Highland, MI 48357 (248)887-4173 (800)824-8351 (248)474-6539 FAX (248)887-2755	