

**Scrutiny Standing
Panel Agenda**



**Finance and Performance Management Scrutiny Panel
Wednesday, 9th December, 2010**



**FINANCE RECEPTION REFURBISHMENT AND EXTENSION FEASIBILITY REPORT
(Pages 3 - 54)**

Attached is the NPS feasibility report for the Finance Reception area of the Council building.

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Epping Forest District Council Finance Reception Refurbishment and Extension Feasibility



10-5034
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Contents

Introduction, Background and Clients Brief

Part 1: Architectural and Aesthetics

a) Analysis

- 1.1** Description of Existing Finances Reception
- 1.2** Analysis of current Finance Receptions Strengths, Weaknesses, Opportunities and Constraints
- 1.3** Detailed Client Requirements
- 1.4** Existing Finances Reception Floor Plan

b) Proposals

- 1.5** Outline proposals
- 1.6** Description of Design Proposal

Part 2: Mechanical Services Report and Proposals

- 2.1** Introduction to Mechanical Services
- 2.2** Existing Mechanical Services
- 2.3** Mechanical Services Proposals
- 2.4** Estimated Costs for proposed Mechanical Services Works

Part 3: Electrical Services Report and Proposals

- 3.1** Introduction to Electrical Services
- 3.2** Existing Electrical Services
- 3.3** Electrical Services Proposals
- 3.4** Estimated Costs for proposed Electrical Services Works

Part 4: Comparative Cost Summary

- 4.1** Cost Breakdown of Proposed Works

Epping Forest District Council Finance Reception Refurbishment and Extension Feasibility

Introduction: This Feasibility Study is concerned with the refurbishment of the Financial Reception of Epping Forest District Council.

This report has been produced by NPS South East on behalf of Epping Forest District Council.

Background:

Epping Forest District Council has identified a need for the refurbishment and improvements to the existing Financial Reception and has commissioned NPS to undertake a Feasibility and Cost Estimate exercise.

Client's Brief:

To investigate the possibilities for:

- The **internal refurbishment** and alteration of the existing Finances Reception to suit modern legislation and requirements (**Option 1**)
- The **internal refurbishment** of the existing Finances Reception and **extension** of the existing facilities (**Option 2**)
- The **internal refurbishment** of the existing Finances Reception, **extension** of the existing facilities and improvements to the existing **Main Entrance** (**Option 3**)

Proposal Objectives:

- Provide Part M compliant service points
- Improve the acoustics and privacy for customers
- Provide an alternative call and queue management system
- Maintain and where possible improve levels of security
- Create a welcoming atmosphere

Timescale: Future Works

Budget: Undefined

This Feasibility has analysed the building in accordance with the requirements, in its entirety as a refurbishment project in the following sections:

Part 1: Architectural and Aesthetics

- a) Analysis**
- b) Proposals**

Part 2: Mechanical Services Report and Proposals

Part 3: Electrical Services Report and Proposals

Part 4: Cost Summary

Part 1: Architectural and Aesthetic Refurbishment

a) Analysis

1.1 Description of Current Finances Reception

The current Finances Reception is well sited with direct public access from a covered pedestrian walkway opposite the Main Reception.

The current Finances Reception is an area for members of the public to make use of the Cashiers Desk and meet with members of the Council Tax and Benefits Team.

The current facilities include three cashiers' desks, three interview booths and 2 private interview rooms. One of the private interview rooms is currently set up to allow recorded interviews under caution.

1.2 Analysis of current Finance Reception- Strengths, Weaknesses, Opportunities and Threats

Strengths

- Good location for public access
- Large clear spans
- Security infrastructure
- Strong architectural character

Weaknesses

- Poor acoustics
- Lack of flexibility in furnishings
- Lack of comfort
- Poor lighting
- Technical faults in heating induction loop
- Waiting area is uncomfortable and too close to interview booths
- Call and queue management system
- No Part M compliant service point
- Lack of sound proofing in interview facilities
- Public entrance is also used by staff out of opening times
- Heat loss through lobby doors

Opportunities

- Large clear spans allow flexibility for the new layout
- Create a new staff entrance to avoid clashes of staff and members of the public
- Extend the building and use internal and external glazing to enhance natural light internally



Above: Image of existing Finances Reception Entrance



Above: Image, Depicts the existing layout and furnishing of the Finances Reception



Above: Image, Depicts the existing layout and furnishing of the Finances Reception



Above: Image, Depicts the existing interview booths

Threats

- Change in level between cashiers office and public area
- Low ceiling levels
- Restricted area

1.3 Detailed Client Requirements

Physical Requirements

1. A counter area where any discussion will not be overheard by everyone else waiting.
2. The counter area must have three interview points.
3. One of the cashiers positions to be altered to allow drop down to low level for dealing with wheelchair users (DDA).
4. At least two private interview rooms which are welcoming, with adequate measures for staff security.
5. One of the private interview rooms to be comfortably large enough to accommodate 6 people.
6. Access to interview rooms must be wide enough for electric wheelchair users.
7. An area for the customers at the counter that has two seats/room for wheelchair users/room for pushchair.
8. A waiting area that is not in the middle of the access to the cashier's desk.
9. An area away from the counter where a customer can be seated and be able to write/complete a form etc
10. Space for a photocopier/scanner/printer for the staff to copy/print documents

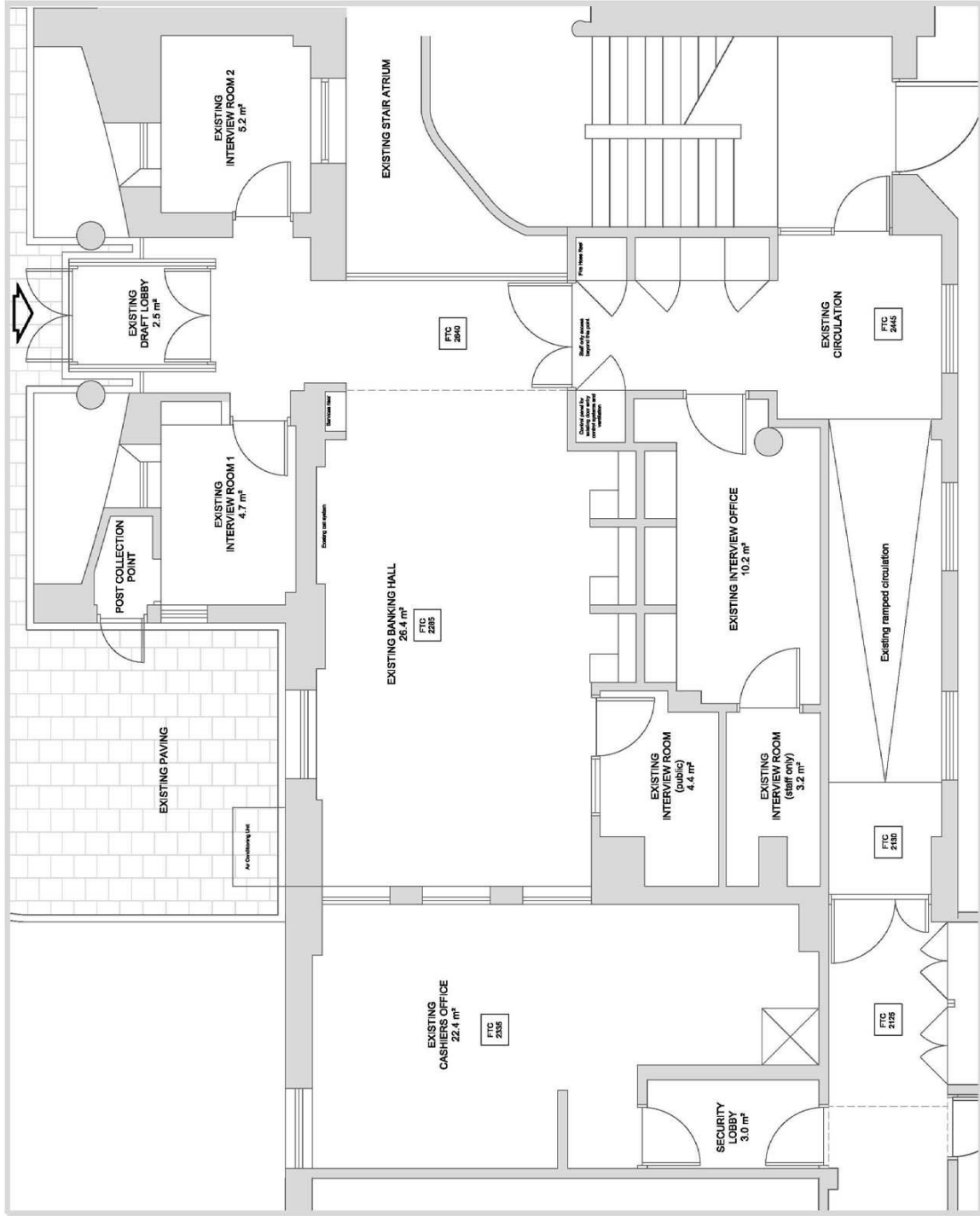
Operational Requirements

1. No full glass screens, partial screening or wires would allow better communication without compromising security.
2. A means of knowing that a person is waiting rather than the current telephone arrangement.
3. At least one of the private interview rooms should have sufficient soundproofing to avoid background noise for taped Interviews Under Caution.
4. New panic alarms easily accessible but located to avoid accidental alarms.
5. Emergency exits in the old house to be turned into staff entrances to eliminate staff having to enter through the reception area. This would open up the reception area and allow more space. (Subject to Planning and Building/Fire Regulation considerations).

Aesthetic Requirements & Customer Facilities

1. Comfortable seating at the counter positions to replace the existing fixed arrangement.
2. Comfortable seating in the waiting area.
3. Different options for some form of ticketing queue system.
4. An area with play items to occupy children whilst their parents are waiting/their enquiry is being dealt with.
5. Water dispenser nearby as it is not uncommon for customers to get upset or ill.
6. A proper display board for information notices/ an information TV.

1.4 Existing Finances Reception Floor Plan



b) Proposals

1.5 Outline Proposals

The outline proposals have been formulated based on the constraints of the existing building as considered below.

1.5.1 Considerations:

- Structure and form of existing building
- Level changes between the Cashiers Area and Finances Reception
- Established circulation routes
- Part M requirements
- Structural openings and obstructions
- Fire escape routes and compartmentalisation

1.5.2 Proposal Description

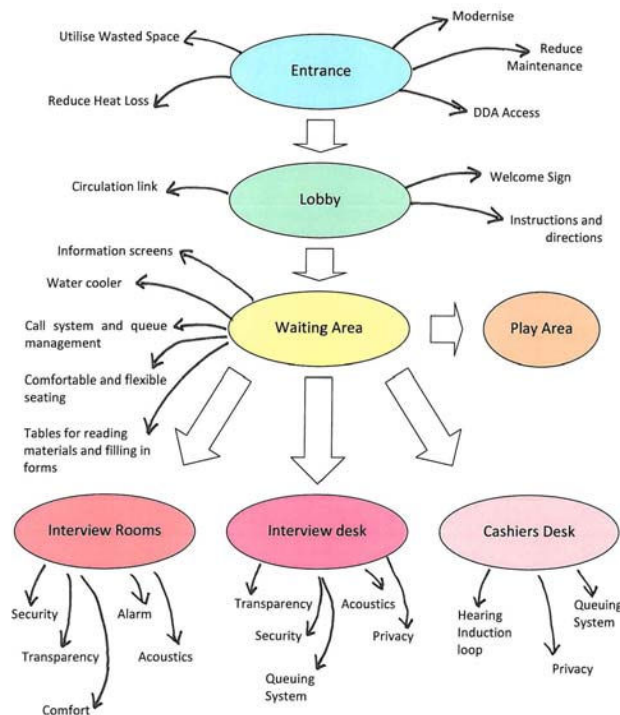
The proposal described in this section was selected from a range of options through consultation with the client; superseded proposals are included in [Appendix 1](#).

The proposals have been divided into three phases to assess the three options set out in the clients brief.

1.5.3 Concept Overview

The concept for the proposal is the 'New friendly face of banking' which has been led by high street chain banks in a move to appear more customer friendly without reducing levels of security.

The concept is based on the design principles of light and transparency within an open plan public area.



Left: Diagram illustrates the interrelation and issues for consideration relating to the required spaces.

1.6. Description of Outline Proposals

Please Note: For the purpose of these descriptions 'Banking Hall' refers to the public waiting area labelled as Banking Hall on the plans 'Finances Reception' refers to the area to be refurbished in its entirety.

1.6.1 Option 1 – Internal Refurbishment to Finances Reception

The refurbishment of the proposal is based on the removal of all partition walls to create an open plan and visually transparent Financial Reception Area.

The removal of walls and full height barriers and introduction of low level visual barriers, such as the interview desk, will create the impression of a larger open space. Staff only access doors are to be moved back to increase the area of public access. New doors, light and bright finishes and an injection of colour, along with improved lighting, will create a welcoming, friendly and open atmosphere.

Part M

New DDA compliant interview points will be created within the Banking Hall to allow two seated positions opposite each interview point. Seating to be non-fixed to allow removal for wheelchair access to the desk.

Interview points are designed to be flexible use to allow cashiers to use one of the three desk positions as a service point for wheelchair users when required

Existing circulation route to the left hand side of the Banking Hall has been maintained as a clear access and fire escape route.

With regard to accessible WC's we deem that under Part M the accessible WC provided within the main reception satisfies the Regulations. However, this would need to be checked as part of the Building Regulations Application at detailed design phase.

Acoustics

Glazed screens and hearing loop to interview points are to be removed and new low level privacy screens are to be introduced. Screens are to be solid and semi transparent to maintain acoustic barriers without blocking light or sightlines.

Hard floor finish to be carpeted with acoustic underlay and acoustic panels are to be added to walls to create a fresh modern look and reduce sound reflectance.

Fully glazed screens to Cashiers Desk are to be removed and replaced with partial screens. Details of screens to be discussed at detailed design phase. Hearing loop to cashiers desk to be replaced and updated

Furniture

The removal of the hard fixed furniture and replacement with modern shaped heavy duty soft furnishings will not only create a more welcoming and inviting atmosphere but will enhance the comfort of visitors and staff. Waiting furniture to be backless to allow flexibility in seating arrangement. Coffee tables have been provided to allow customers to sit and fill in forms and provide a place to store magazine and children's books.

There are two possible approaches to the proposed furniture:

- 1) Furniture which is too heavy to be moved by less than two people
- 2) Fixed furniture

There are a variety of furniture ranges to suit both approaches. Furniture options will be discussed as part of the detailed design phase.

Queue Management and Call System

Introduction of an integrated queue management system and display information screen to keep customers entertained and informed whilst they wait.

Following discussions of existing working methods and requirements for the call system several options were investigated and the following two outline options were suggested by queue management specialists:

- Ticket based system, where walk in appointments could summon a member of the relevant team via a touch screen and then take a ticket to ensure sequential service. Ticket number being served would be displayed above desks and on information screen. The member of staff on call in the relevant office would be alerted to a waiting customer via a signal within the office. Cost of approximately £5000.00 for LAN based system.
- Database system, where walk in appointments could summon a member of the relevant team by entering their details via a touch screen. The details would then be compared to a database to identify the customer. The member of staff on call in the relevant office would be alerted to a waiting customer via a signal within the office. Cost adjustment of approximately £2000.00 to upgrade previous system to a database system.

With both systems any customer checking in for a prearranged appointment could use a range of methods to log into the system. This would then generate an email to the relevant member of staff to inform them that their customer is waiting in the Banking Hall.

Both of the above call management systems are viable for the requirements outlined by the Financial Reception team. The specifics of the preferred system will be discussed at detailed design stage.

Formalisation of the queuing system by the Cashiers Desks also provides a shelf for bankers to fill in forms while they wait.

Security

Panic buttons to each interview point, interview rooms and cashiers points to be integrated into existing security system and door control system.

Adjustments to existing CCTV system to be made to suit new floor plan.

Structural Alterations

As part of the feasibility study observational non invasive investigations of the structure have been carried out and conclusions have been drawn based on visible structural elements. The scheme presented is thought to be achievable given the above information. As works move forward invasive structural investigation may be necessary prior to commencing the detailed design phase.

Optional Extra:

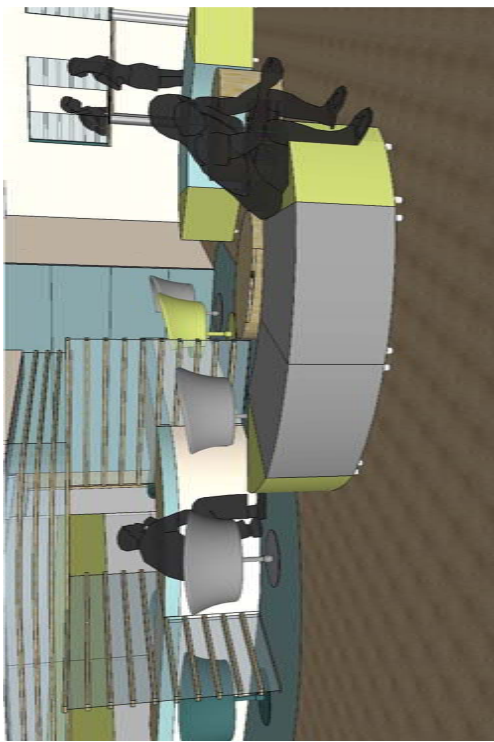
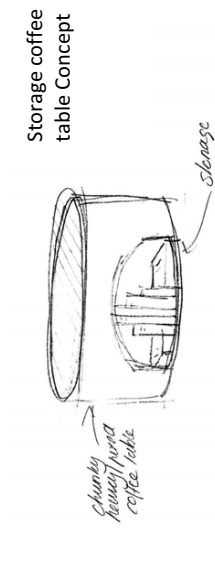
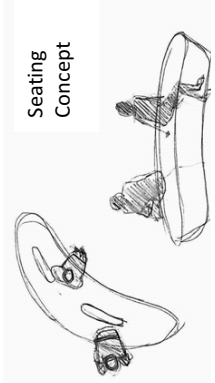
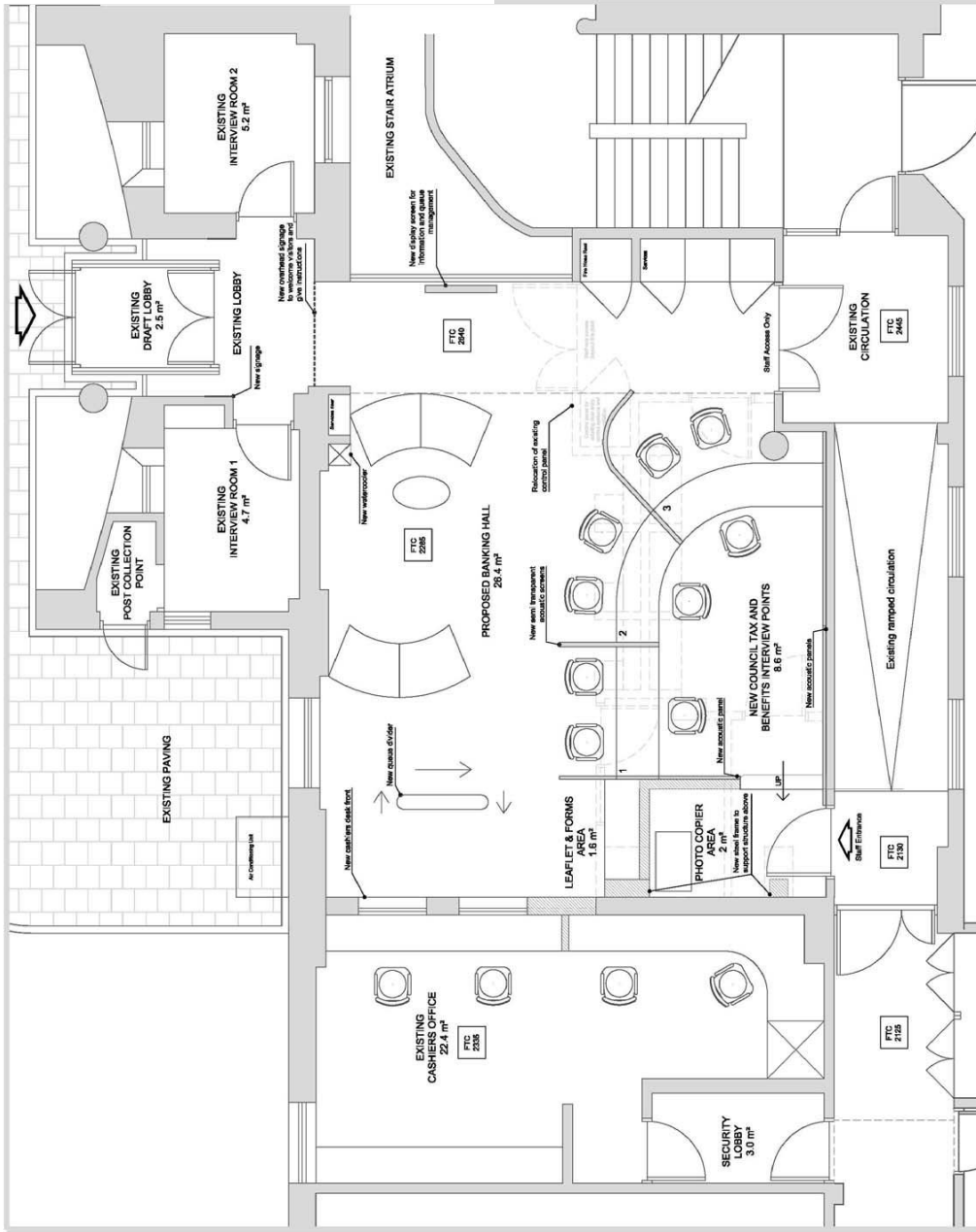
New Staff Entrance

To reduce staff traffic through the public Financial Reception an alternative staff entrance could be created utilising an existing fire exit. These works would include creating a new pedestrian access through an existing area of flower beds to the existing fire exit and modifications to external security system, lighting and CCTV. Modifications to this area could also include a canopy.

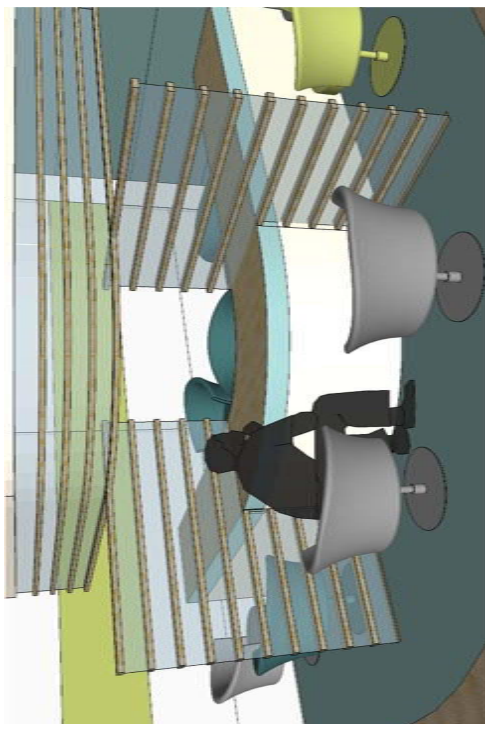
The new staff entrance should not affect existing fire escape routes as all final fire escapes will be maintained.

We estimate to carry out the above works would be approximately £7000.00 in addition to Option 1 works.

1.6.1 Option 1: Interior Refurbishment of Finances Reception



Impression of proposed Financial Reception Area



Impression of proposed Interview Points

1.6.2 Option 2 - Internal Refurbishment to Finances Reception and Extension of existing facilities

Provide an extension to create a group meeting and large interview room accessed from the Banking Hall.

The extension is to be a simple flat roofed or mono pitched construction to echo the Architectural Style and materials of the adjoining 1980's building. The extension is to be almost fully glazed to maximise natural light into the extension and Banking Hall. The privacy of staff and members of the public is to be maintained by frosting and manifestations to glazing.

New access to the proposed Group Meeting Room and Interview Room 1 to is created by taking window opening to ground level and installing fully glazed partition and sliding door to maintain natural light levels and maximise useful space.

Part M

New access to Proposed Meeting Room and Interview Room 1 to be a minimum of 900mm wide to allow easy access for wheelchair users.

Acoustics

Acoustic panels to be added to walls of the Group Meeting Room and Interview Room 1 to create a fresh modern look and reduce sound reflectance.

Sliding doors and glazed surround to include acoustic seals.

Furniture

The removal of the hard fixed furniture and replacement with modern shaped heavy duty soft furnishings will create a welcoming atmosphere and enhance the comfort of visitors and staff.

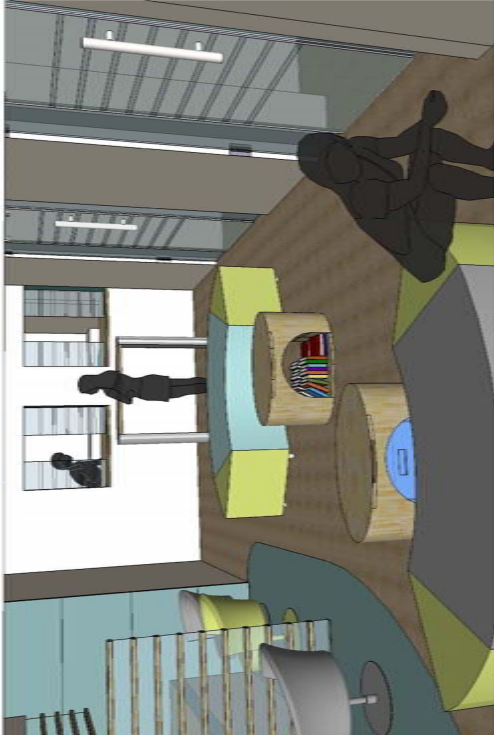
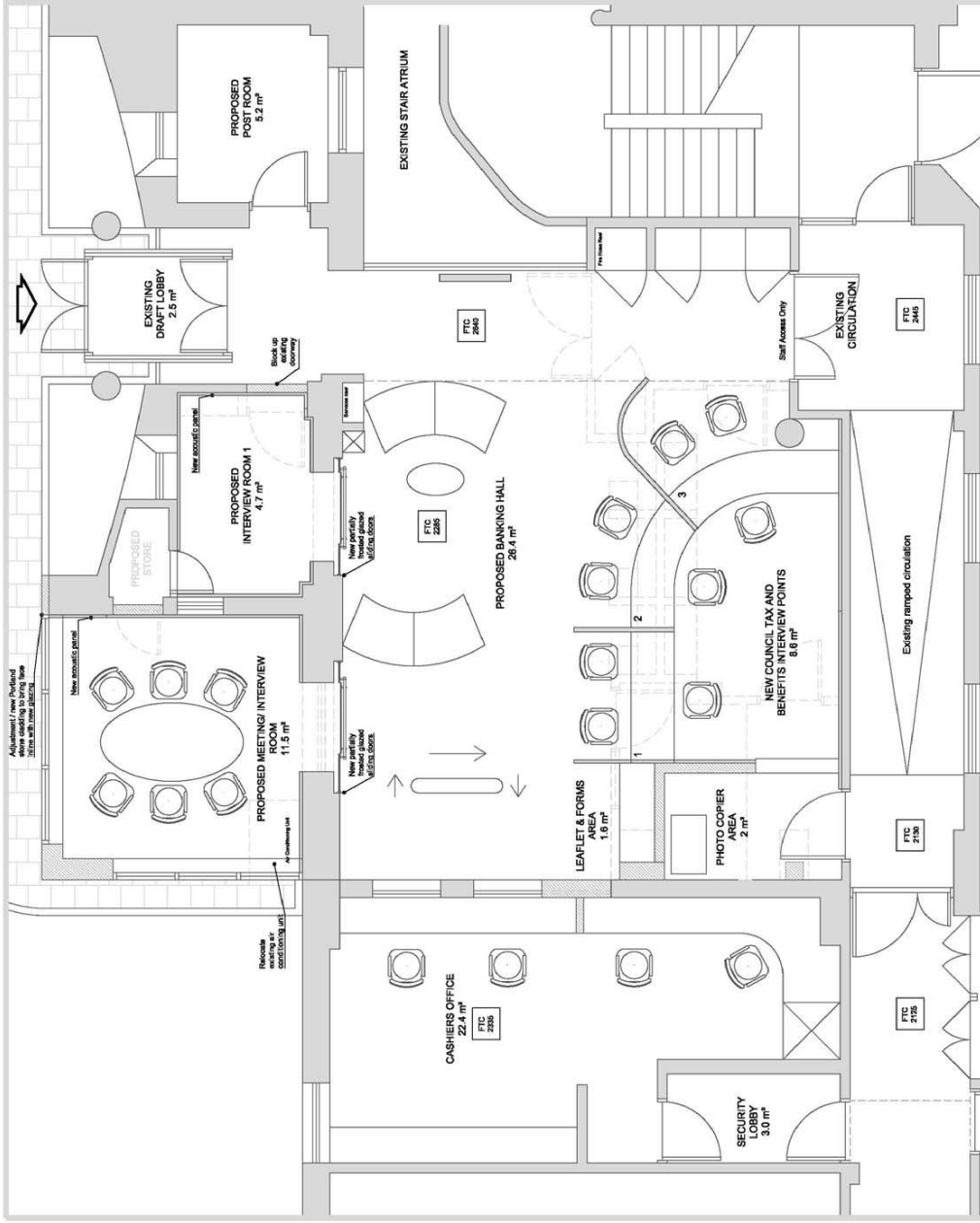
Security

Panic buttons to each interview rooms and glazed doors will be partially frosted to allow staff a level of visibility and customers' anonymity.

Post Room

Interview Room 2 is currently used as a post store, due to its proximity to the entrance, as part of these works its use will be formalised as a post room.

1.6.2 Option 2: Interior Refurbishment of Finances Reception & Extension of Existing Facilities



Impression of new access to Group and Interview Room 1 from Financial Reception



Impression of view from Group Meeting Room to Financial Reception

1.6.3 Option 3 - Internal Refurbishment to Finances Reception, Extension of existing facilities and Modification to the existing Main Entrance

Part M

New sliding Entrance Doors and fully automated inner lobby doors will allow a wider and wheelchair friendly entrance.

Acoustics

Glazed screens to entrance elevations will be double glazed and reduce noise and heat loss. The resulting internal area would make a good place for external Epping Forest Council Displays.

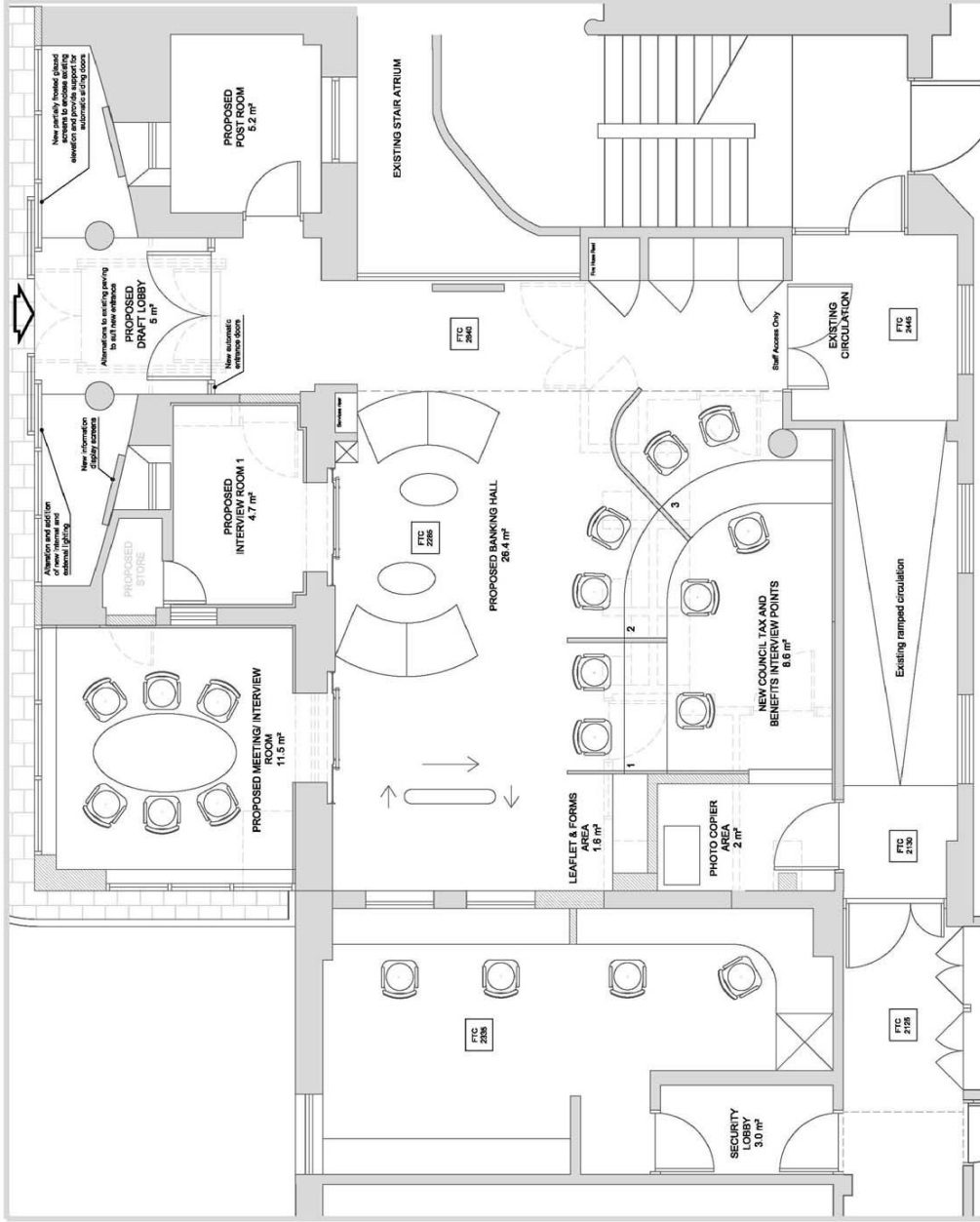
Heat Loss

The existing external lobby doors are not automated and are therefore fixed open during opening hours to allow easy public access. The new automated lobby doors, both external and internal, will reduce heat loss by maintaining a lobby space and reducing drafts during opening hours.

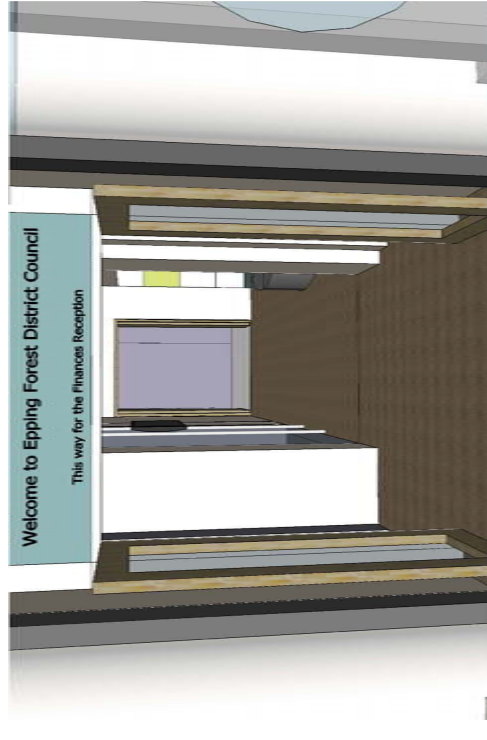
Security

Security system will need to be extended to take in the new display areas and Entrance Lobby. If the Council feels additional security measures would be required to protect the glazing and display areas electronic roller shutters have been included as part of the works.

1.6.3 Option 3: Interior Refurbishment of Finances Reception. Extension & Remodelling of Existing Entrance



Impression of view to new extension and new entrance elevation



Impression of view from new Entrance to Finances Reception

Part 2: Mechanical Services Report and Proposals

2.1 Introduction to Mechanical Services

The intention of the study is to inspect the existing services with a view to establishing workable and cost effective solutions to provide improvements to existing space conditions within the proposed banking hall and cashiers office using energy efficient plant and equipment.

Control strategy shall form part of the proposal in order to provide close automatic control of space conditions whilst also providing ease of operation for the end user.

Generally this study does not extend to a comprehensive condition survey, although items having possible serious consequences shall be reported and re-use of existing plant & equipment nearing the end of its serviceable life shall be excluded from the scope of any future works.

2.2 Existing Mechanical Services:

The existing mechanical services to the Financial Reception area and Cashiers Room consist of a mixture of heating, ventilation and cooling equipment as follows:

2.2.1 Heating:

Steel panel radiators situated in strategic positions to provide an element of background space heating.

An air pre-heater battery to temper fresh air prior to it entering the space via a supply air fan, terminal air supply units, associated ductwork, grilles, etc.

Air re-heater batteries within two terminal air supply units.

Wall mounted inverter driven heat pump, D/X, air recirculation units with the facility to provide heating or cooling.

Electric powered air curtain heaters fitted above entrance doors to assist in reducing the effect of through draughts when both sets of doors are opened simultaneously.

2.2.2 Ventilation:

Fresh air is introduced via a fan, filter, pre-heater battery, silencers, air supply terminal units and finally supplied to the space by way of grille terminals.

Stale air is extracted from the space via a simple fan unit to atmosphere; a silencer is installed to reduce noise re-entering the space.

There is no facility for heat recovery and uncontrolled backdraughts are prevented by operation of installed motorised dampers.

2.2.3 Cooling:

Two supply air terminal units are fitted with D/X cooling coils and condense trays, their purpose being to cool incoming fresh air mixed with a portion of return air when internal condition dictate. (Note that all refrigerant pipework has been disconnected from both units, therefore cooling facility no longer available)

Additional cooling provided to some areas via the wall mounted inverter driven heat pump, D/X, air recirculation units with the facility to provide cooling or heating.

2.2.4 Existing Services Overview:

The ventilation services are aged and are reaching the end of their serviceable life. The cooling facility to the two supply air terminal units is disconnected / decommissioned. It is unclear if the heating facility to the two supply air terminal units is functioning at the present time or not.

The internal wall mounted heat pump units together with their external condenser units are a more recent installation and are still providing useful heating / cooling to the spaces in which they are positioned. It is proposed to retain some of these and decommission others for handing back to the Client for possible re-use elsewhere.

The duct mounted supply / extract fans are noisy and the systems as a whole do not provide any heat recovery benefits and as a result the incoming fresh air imposes large heating / cooling loads dependent upon season.

Existing radiators produce very limited amounts of heat output to the areas and can only be considered as providing background heating at best.

It would appear that the existing level of heat input to the space may be inadequate. It is not clear from the survey if the pre-heater battery and re-heater batteries are functioning as designed and this, together with the high rate of infiltration air entering when both sets of doors are opened simultaneously, may have an adverse effect on space temperatures during colder weather conditions.

2.3 Mechanical Services Proposals:

2.3.1 Option 1

Banking Hall Enabling Works

Above Ceiling: remove all existing ventilation plant, ductwork, grilles, refrigeration pipework, controls wiring and equipment, heating pipework and mains electrical wiring serving air handling plant back to convenient position, to leave ceiling space clear of any unnecessary obstructions.

Retain existing external louvres for re-connection.

Floor Level: Decommission and remove wall mounted heat pump unit and associated external condensing unit (hand this system back to client for possible future use).

Disconnect and remove control panel and terminate existing re-useable cabling in readiness for extending to new control panel position.

Identify source of flow and return pipework to radiators and install isolation valves as necessary to allow for drain down and removal of three radiators leaving connections in situ for future connection to higher output radiators.

Note: Existing electric over door heaters can either be decommissioned or simply switched off for possible re-use as a standby heat supply.

Banking Hall New Installation

A complete fresh air supply and extract system to provide adequate fresh air in accordance with Regulations for expected occupancy levels consisting of:

- Existing external louvres
- One self contained Daikin fresh air VAM unit or similar containing fans to supply fresh air and extract stale air to atmosphere. This unit has the capability to recover up to approximately 75% of heat or cool from the extracted air, dependent upon season, and is also able to bypass heat recovery when recovery is not advantageous. The unit shall be quiet in operation with silencers being fitted within ductwork if considered beneficial, although experience has shown that these are not always necessary.
- Solid supply and extract ductwork with minimal flexible ductwork connections to appropriately sized ceiling diffusers and/or wall grilles.
- Ductwork insulation.
- Low Pressure Hot Water (LPHW) air heater battery complete with 3 port control valve for the few occasions when trimming of incoming air is required to prevent unwanted draughts, however, for the majority of operating conditions this will not be necessary.

Two ceiling mounted D/X heat pump cassette type units together with one compatible external air cooled condenser to provide adequate heating or cooling to the banking hall, dependent upon season.

One LPHW ceiling mounted air curtain type fan convector in the vicinity of the lobby doors with localised thermostat control.

Control panel situated in position to be agreed, to enable control and monitoring of new installed plant which shall be fitted with Modbus, BACnet, or similar connectivity modules to interact with building's Trend BMS system if required. (**Note:** control panel shall also house control gear associated with cashier office plant)

Various sensors, for example, space, supply air, extract air, etc to relay specific information to the Trend BMS system if required.

Replacement radiators of greater output than the originals, situated to the sides of lobby doors and within banking hall.

Consideration could be given to controlling the VAM units via CO2 sensors appropriately positioned to further conserve energy, subject to Building Control approval. Manual override facility would be provided.

Cashiers Office Enabling Works

Above Ceiling: remove all existing ventilation plant, ductwork, grilles, refrigeration pipework, controls wiring and equipment, heating pipework and mains electrical wiring serving air handling plant back to convenient position, to leave ceiling space clear of any unnecessary obstructions.

Retain existing external louvre for reconnection.

Floor Level: Clean and service existing wall mounted heat pump unit and associated external condensing unit which will be retained to provide heating and cooling to area.

Cashiers Office New Installation

A complete fresh air supply and extract system to provide adequate fresh air in accordance with Regulations for expected occupancy levels consisting of:

- Existing external louvre.
- One additional new external louvre.
- One self contained Daikin fresh air VAM unit or similar containing fans to supply fresh air and extract stale air to atmosphere. This unit has the capability to recover up to approximately 75% of heat or cool from the extracted air dependent upon season, and is also able to bypass heat recovery when recovery is not advantageous. The unit shall be quiet in operation with silencers being fitted within ductwork if considered beneficial, although experience has shown that these are not always necessary.
- Solid supply and extract ductwork with minimal flexible ductwork connections to appropriately sized ceiling diffusers.
- Ductwork insulation.
- LPHW air heater battery complete with 3 port control valve for the few occasions when trimming of incoming air is required to prevent unwanted draughts, however, for the majority of operating conditions this will not be necessary.

Control gear to enable control and monitoring of new installed plant which shall be fitted with Modbus, BACnet, or similar connectivity modules to interact with building's Trend BMS system if required. (**Note:** control gear shall be installed within control panel as described within "option one banking hall new installation above").

Various sensors, for example, space, supply air, extract air, etc to relay specific information to the Trend BMS system if required.

Consideration could be given to controlling the VAM units via CO2 sensors appropriately positioned to further conserve energy, subject to Building Control approval. Manual override facility would be provided.

Photo Copier Area New Installation

An air extract system comprising: Ceiling mounted extract fan, ductwork, and external discharge louvre.

The extract fan would be controlled via a PIR detector and overrun timer. A separate local isolation switch would be installed to allow users to manually switch off power to the extract fan when it was considered to be not required.

2.3.2 Option 2

Banking Hall Enabling Works

Above Ceiling: All as per “Option 1” above, except that existing external louvres would be removed.

Floor Level: All as per “Option 1” above, except that radiator within banking hall would be removed and pipework cut back to convenient point.

Banking Hall New Installation

A complete fresh air supply and extract system to provide adequate fresh air in accordance with Regulations for expected occupancy levels consisting of:

- Roof mounted intake and discharge louvres.
- One self contained Daikin fresh air VAM unit or similar containing fans to supply fresh air and extract stale air to atmosphere. This unit has the capability to recover up to approximately 75% of heat or cool from the extracted air, dependent upon season, and is also able to bypass heat recovery when recovery is not advantageous. The unit shall be quiet in operation with silencers being fitted within ductwork if considered beneficial, although experience has shown that these are not always necessary.
- Solid supply and extract ductwork with minimal flexible ductwork connections to appropriately sized ceiling diffusers and/or wall grilles.
- Ductwork insulation.
- LPHW air heater battery complete with 3 port control valve for the few occasions when trimming of incoming air is required to prevent unwanted draughts, however, for the majority of operating conditions this will not be necessary.

Two ceiling mounted D/X heat pump cassette type units together with one compatible external air cooled condenser to provide adequate heating or cooling to the banking hall, dependent upon season.

One LPHW ceiling mounted air curtain type fan convector in the vicinity of the lobby doors with localised thermostat control.

Control panel situated in position to be agreed, to enable control and monitoring of new installed plant which shall be fitted with Modbus, BACnet, or similar connectivity modules to interact with building’s Trend BMS system if required. (**Note:** control panel shall also house gear associated with cashier office plant)

Various sensors, for example, space, supply air, extract air, etc to relay specific information to the Trend BMS system if required.

Replacement radiators of greater output than the originals, situated within the existing draught lobby.

Consideration could be given to controlling the VAM units via CO2 sensors appropriately positioned to further conserve energy, subject to Building Control approval. Manual override facility would be provided.

Cashier's Office Enabling Works

Above Ceiling: All as per "Option 1" above.

Floor Level: All as per "Option 1" above.

Cashiers Office New Installation

All as per "Option 1" above.

Interview Office New Installation (4.7 m2)

Provide complete minimal ventilation system in accordance with Regulations for the anticipated occupancy level, comprising a small Vent Axia or similar combined supply and extract unit complete with heat recovery facility, flexible ductwork, insulation and roof terminals.

Increase the size of existing emitter to offset the additional heat load imposed by the incoming fresh air which cannot be dealt with by heat transfer.

Consideration could be given to controlling the ventilation unit via CO2 sensors appropriately positioned to further conserve energy, subject to Building Control approval. Manual override facility would be provided.

Meeting/Interview Room New Installation

One centrally positioned ceiling mounted D/X heat pump cassette type unit together with one compatible external air cooled condenser to provide adequate heating or cooling to the meeting/interview room, dependent upon season.

Control gear to enable control and monitoring of new installed plant which shall be fitted with Modbus, BACnet, or similar connectivity modules to interact with building's Trend BMS system if required. (**Note:** control gear shall be installed within control panel as described within "option one banking hall new installation above").

A space sensor to relay specific information to the Trend BMS system if required.

Natural ventilation would be available via openable windows.

Photo Copier Area New Installation

All as "Option 1" above

2.3.3 Option 3

Banking Hall Enabling Works

Above Ceiling: All as per "Option 2" above.

Floor Level: All as per "Option 2" above, with exception that Existing electric over door heaters will be removed.

Banking Hall New Installation

All as per "Option 2" above, except that enlarged radiators would now be positioned within new proposed draught lobby.

Cashier's Office Enabling Works

Above Ceiling: All as per "Option 1" above.

Floor Level: All as per "Option 1" above.

Cashier's Office New Installation

All as per "Option 1" above.

Interview Office New Installation (4.7 m2)

All as "Option 2" above

Interview Office New Installation (5.2 m2)

Provide complete minimal ventilation system in accordance with Regulations for the anticipated occupancy level, comprising a small Vent Axia or similar combined supply and extract unit complete with heat recovery facility, flexible ductwork, insulation and wall terminals.

Increase the size of existing emitter to offset the additional heat load imposed by the incoming fresh air which cannot be dealt with by heat transfer.

Consideration could be given to controlling the ventilation unit via CO2 sensors appropriately positioned to further conserve energy, subject to Building Control approval. Manual override facility would be provided.

Photo Copier Area New Installation

All as "Option 1" above

Meeting/Interview Room New Installation

All as "Option 2" above

Generally:

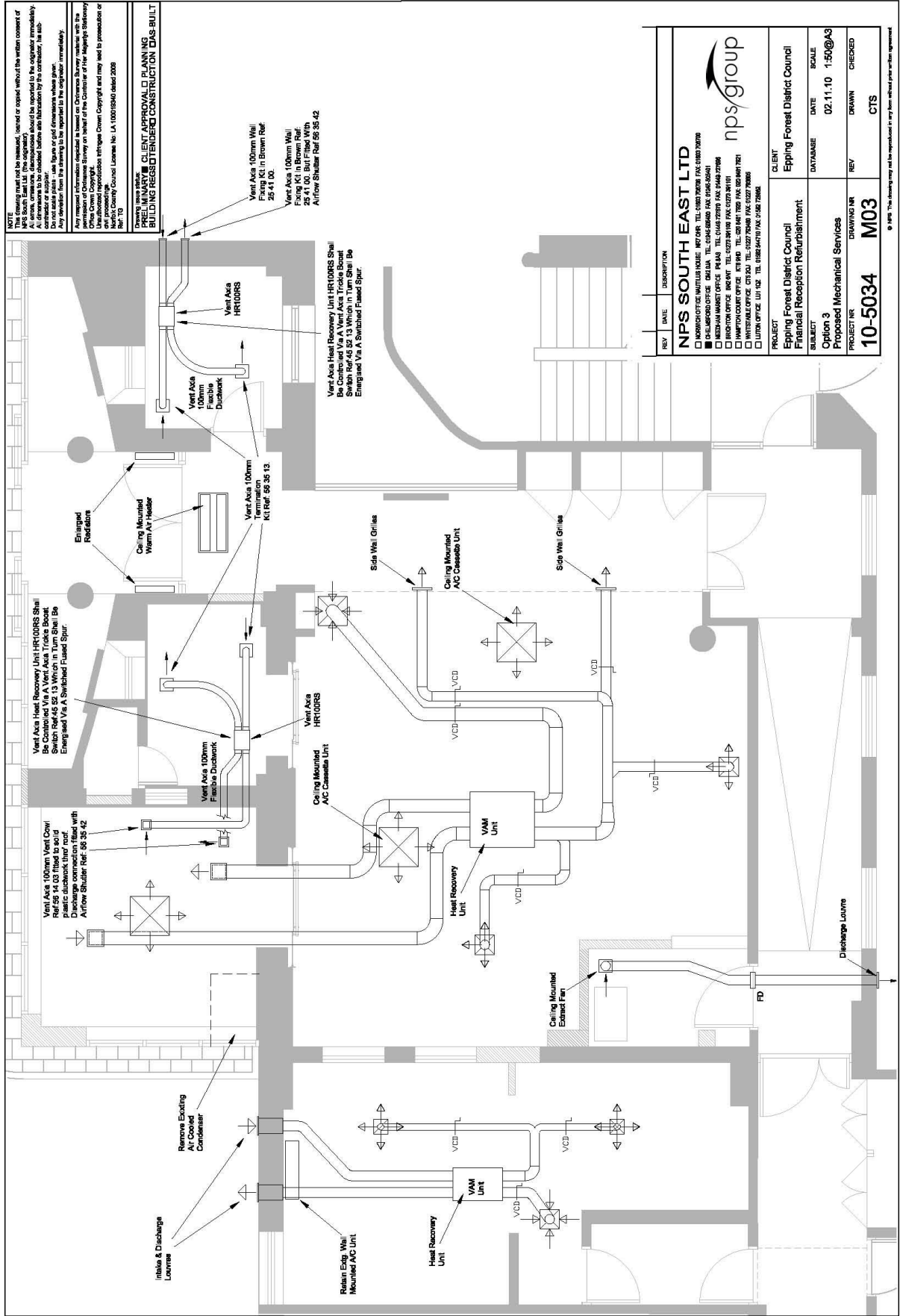
Where reference is made to new low pressure hot water heating supplies to equipment it is considered that an adequate supply of LPHW is available from existing boiler outputs and pipework within the building.

It is a fair assumption that this spare LPHW capacity will be available as various items of existing plant and equipment would be removed from service as part of the new works inclusive of air pre-heater batteries and air heater batteries which, generally speaking, are high duty items.

It is estimated that the likely heat output requirement of the new proposals would be in the region of 9 Kw for the worst case scenario, i.e. Option 3.

It is suggested that the spare “low loss header” flow and return connections would be used to supply LPHW to all proposed heating equipment mentioned above, subject to confirmation from recent installers of “low loss header” that capacity is available.

2.3.3 Option 3 Mechanical Works



2.4 Estimated Costs for Proposed Mechanical Services Works:

1) Option 1: £40,000

2) Option 2: £45,000

3) Option 3: £50,000

Note:

The following items are excluded:

Associated builders works,

Professional fees

Any separate infrastructure charges

Any essential maintenance works that may be found to be necessary, nor for rectifying and inherent defects in the existing systems that would affect the operation of the proposed adaptation and new works

Removal of any asbestos that may be found to be present

Additional costs associated with any sections of the proposed works being executed as separate phases or contracts

Part 3: Electrical Services Report and Proposals

3.1 Introduction to Electrical Services

The intention of the study is to inspect the existing services with a view to establishing workable and cost effective solutions to provide improvements to existing space conditions within the proposed banking hall and cashiers office by the introduction of energy efficient LED light technology, with controls incorporated to limit energy consumption when not required.

Control strategy shall form part of the proposal in order to provide close control of lighting, reducing lighting levels for cleaning etc whilst ensuring ease of operation for the end user.

Generally, this study does not extend to a comprehensive study of lighting levels; glare etc., although items having possible serious consequences shall be reported. Plant & equipment nearing the end of its serviceable life would be excluded from the scope of any future works.

The existing emergency lighting is achieved with a central battery system which we would propose to remove from the area of the works and achieve coverage by the introduction of selected luminaires with integral 3 hour emergency facilities and the use of illuminated 'Exit' signs with the latest universal legend.

3.2 Existing Electrical Services

The existing electrical services to the Financial Reception area and Cashiers Room consist of the following:-

3.2.1 Lighting

Lighting in these areas is achieved by a mixture of both linear and compact fluorescent fittings.

3.2.2 Power

Electric powered air curtain heaters fitted above entrance doors to assist maintaining an acceptable temperature within the reception area.

Twin 13A switched socket outlets are distributed throughout the areas at a density to suit the operational requirements of the staff.

3.2.3 Fire Alarm

There are a number of detectors within the area of the works, although the level of protection ('L1', 'L2' etc) was not apparent.

Call points are provided at points of egress and ceiling mounted loudspeakers are used to advise of evacuation procedure to avoid panic.

3.2.4 Existing Services Overview

The majority of existing electrical services within the areas being considered for refurbishment are to be replaced from the local distribution board located in the riser cupboards adjacent to the corridor.

Redundant electrical services are to be isolated and removed. This will include the mechanical plant controls that are redundant and will be renewed in a new position during the refurbishment.

Lighting throughout the building is currently controlled by an ageing automated switching system involving each fitting being individually identified/addressed by a central computer. This will require that each fitting should be partially removed leaving the printed circuit board that identifies the fitting to be isolated prior to removal by persons with specialist knowledge of the system.

3.3 Electrical Services Proposals:

3.3.1 Option 1

Enabling Works

Isolate, make safe and remove all existing electrical equipment within the area of the refurbishment, including all wiring and equipment, luminaires and accessories.

Isolate the fire alarm and detection system within the area whilst retaining the integrity of the remainder of the system.

New Installation

Lighting will be provided to all refurbished areas by the introduction of the latest LED technology in order to significantly reduce the energy consumption in the area. Feature lighting would be provided in the newly formed enclosed areas adjacent to the front entrance.

Emergency lighting is currently provided by a central battery system. Emergency lighting in refurbished areas will be provided by the provision of fittings with an integral 3 hour duration, with test switches located within the electrical riser to allow ease of testing.

We would propose a computer controller lighting control system to provide total flexibility through addressable control and monitoring of every luminaire in the area of refurbishment. Using virtual wiring technology to link each individual luminaire to local control devices through software enabling the complete system operation to be programmed and adapted to suit the evolving operational requirements of the end users. Changes to switching arrangements to suit alterations to zoning and partitioning layouts could be achieved through the software without rewiring, while the system operation could be fine-tuned through learning to achieve the most energy-efficient arrangement and provide set 'scenes' for different user requirements. For example, 'normal opening hours'; 'security lightings'; hours of darkness' etc.

The system could provide real-time monitoring and feedback, display comprehensive information on system operation including the active status of each luminaire, log individual lamp hours-run data, generate recommended re-lamping schedules for optimum replacement, achieve virtual metering of energy consumption, highlight lamp failures and monitor the performance of emergency lighting.

There is a requirement to retain and possibly enhance the existing CCTV security system to cover public areas and points of entry although there is no requirement to introduce coverage in interview rooms. Panic alarms would be provided in each Interview Room.

There is an existing Automated Fire Alarm and detection system, but it does not currently cover the public areas. The existing system would be extended to cover all rooms affected by the proposed refurbishment and the location of existing call points etc would be reviewed as there are currently break glass points which are located away from points of egress.

We would also propose that as part of the refurbishment the clipping of Fire Alarm cabling be enhanced with metal clips and ties to bring the installation up to current standards.

Power outlets will be provided throughout on a similar density to that existing at present, with outlets provided in rooms such as interview rooms to allow for any future change of use.

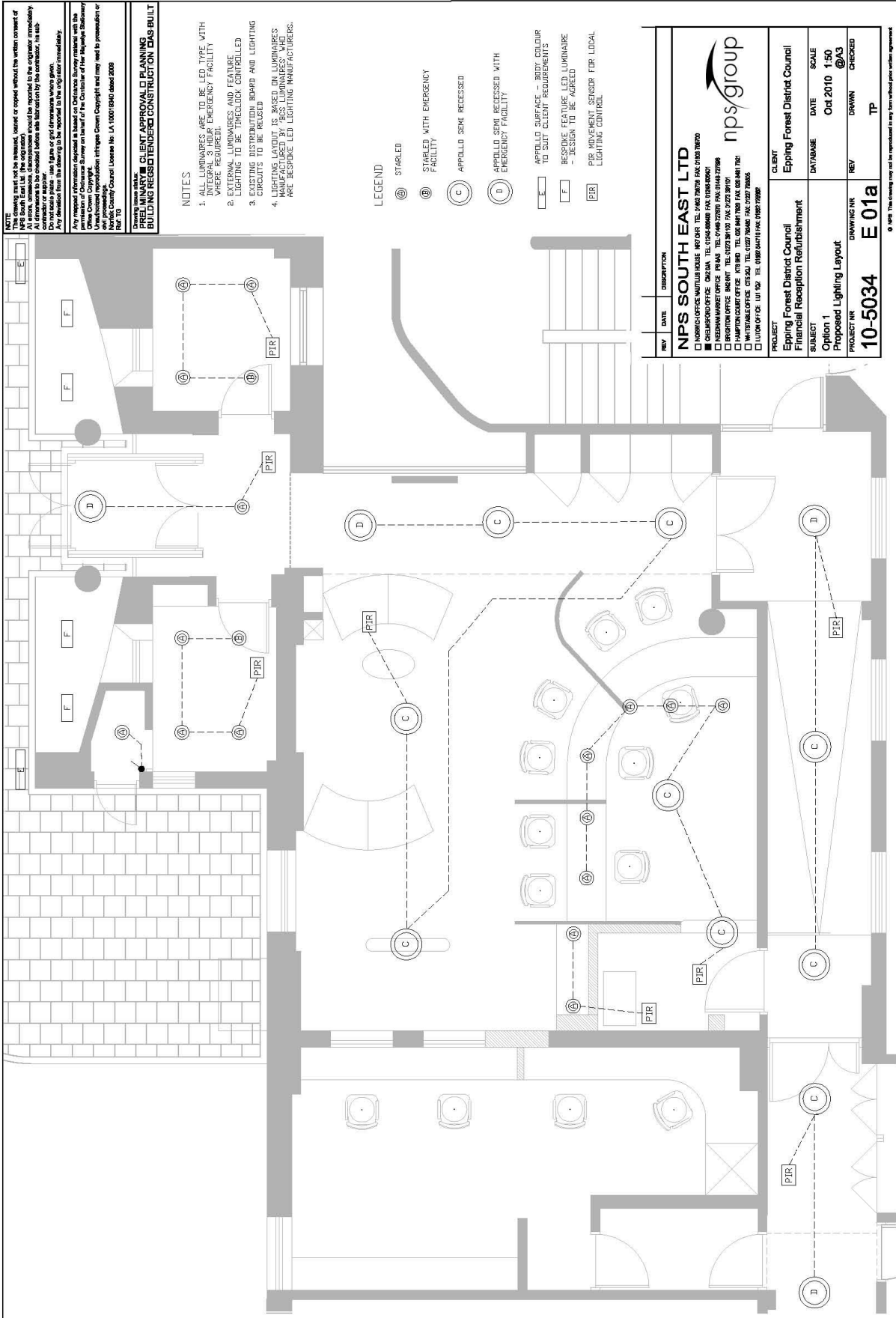
Data/telephone points would be provided at a similar density to that existing at present.

We would also propose investigation of 'client' waiting and or queuing systems. This would allow clients with pre-arranged appointments to register electronically on arrival (usually by the use of a touch screen, entering their date of birth and gender) being advised of where they should wait, whilst the staff responsible for the interview would be alerted to their arrival and electronic records apropos to that client being prepared. For clients who arrive without appointment the system could advise them of where to wait and (based on a pre-set timescale) advise them of the likely waiting time.

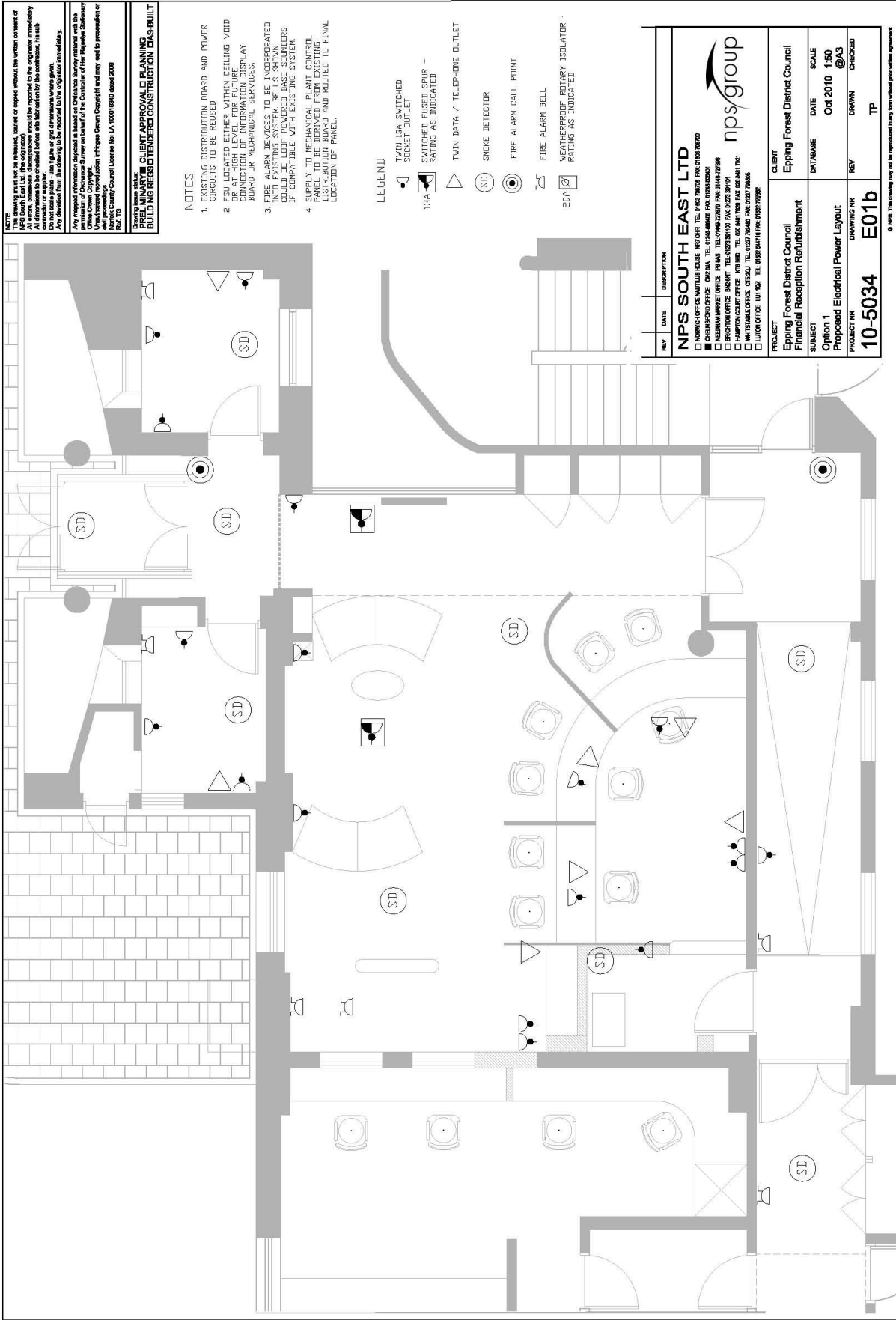
There are existing cable routes that pass through the area of works both within the ceiling voids and on the external elevation that are essential to maintain services throughout the remainder of the site and as such will need to be considered in any proposed extension. The trunking will need to be re-routed to ensure that the point of entry into the new extension is through the wall rather than the roof as this presents far less problems with regard to the ingress of water. There are also A/C condensers which will require relocating.

Costs based on isolation and removal of existing circuits, luminaires and accessories and the safe disposal of same and the re-use of existing supply distribution equipment, as any changes to this switchgear would increase costs dramatically as there are serious space constraints in this area.

3.3.1a Option 1 Electrical Lighting Works



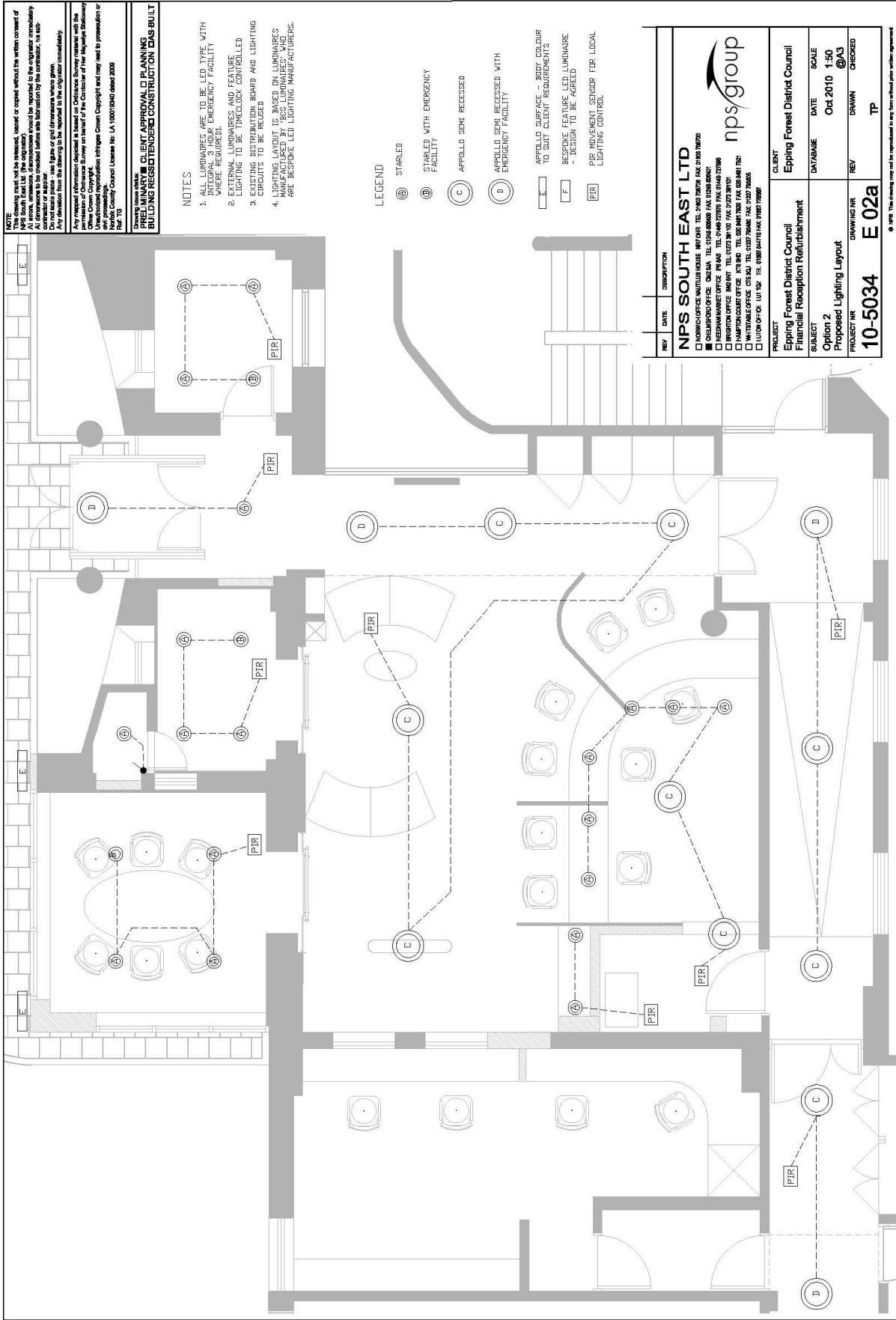
3.3.1b Option 1 Electrical Power Works



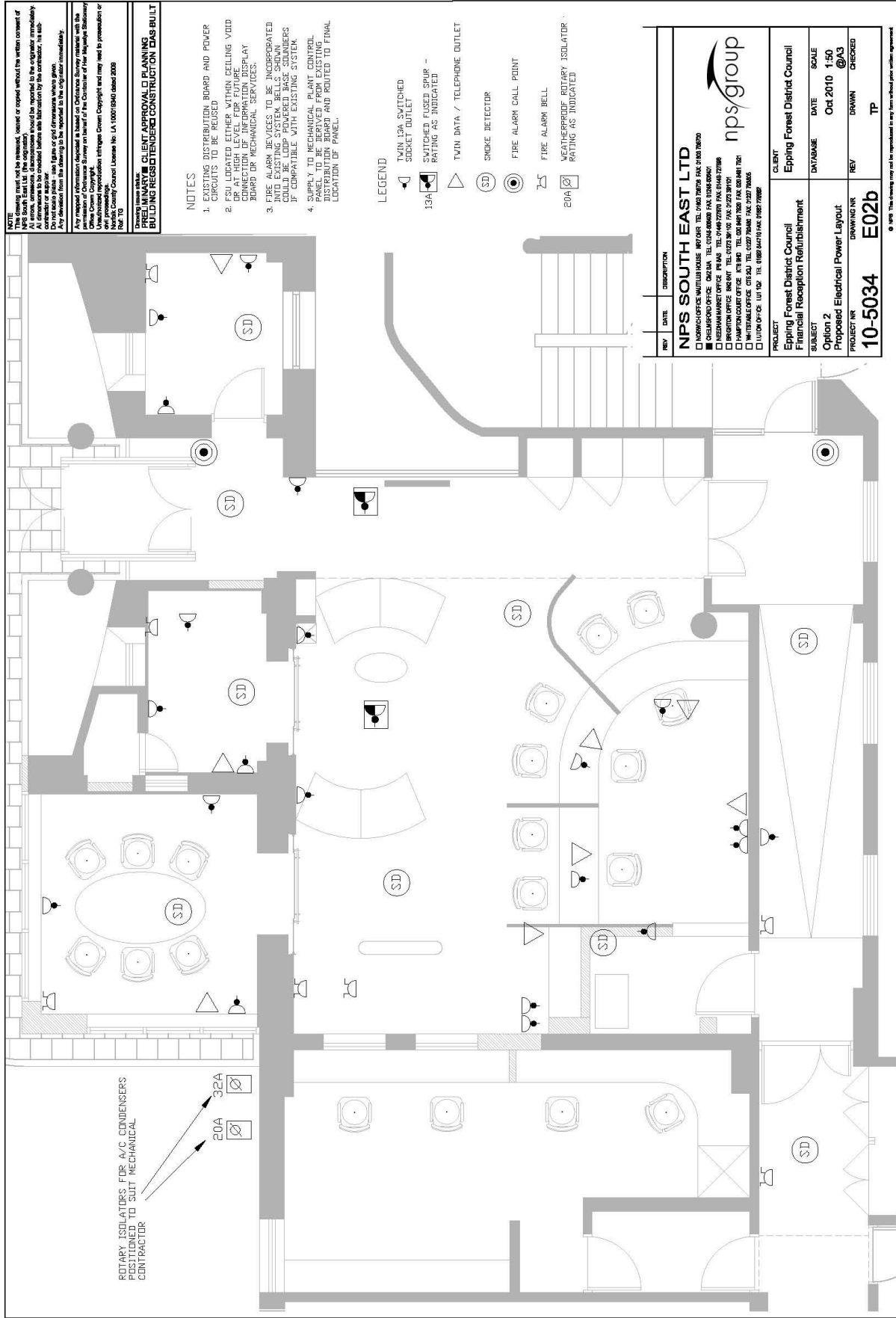
3.3.2 Option 2

Option 2 would include all works in Option 1 with additional works for the supply and installation of lighting, power, mechanical plant supplies etc within the new Meeting room.

3.3.2a Option 2 Electrical Lighting Works



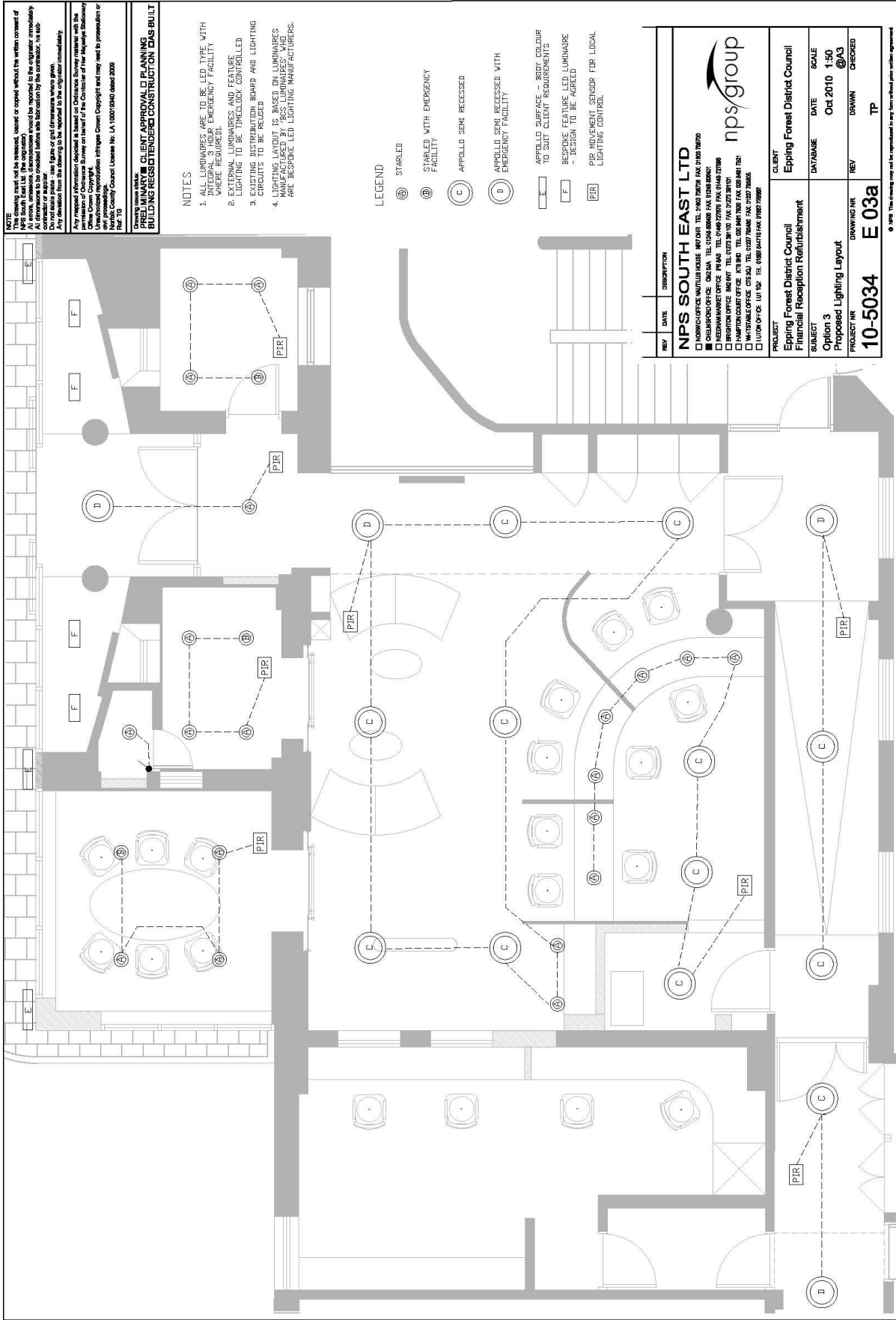
3.3.2b Option 2 Electrical Power Works



3.3.3 Option 3

Option 3 would include all works in Options 1 and 2 with additional works for Lighting, power, mechanical plant and automatic door supplies etc to the revised front entrance lobby.

3.3.3a Option 3 Electrical Lighting Works



3.3.3b Option 3 Electrical Power Works



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 TEL: 01276 278500 FAX: 01276 278501
 EMAIL: info@npsgroup.co.uk

PROJECT: Epping Forest District Council Finance Reception Refurbishment
CLIENT: Epping Forest District Council
SUBJECT: Option 3
PROJECT NR: 10-5034
DRAWING NR: E03b

REVISIONS

REV	DATE	DESCRIPTION

REV	DATE	SCALE	CHECKED

3.4 Estimated Costs for Proposed Electrical works:

Costs based on isolation, removal and disposal of the existing equipment the supply and installation of luminaires, lighting control system, client waiting systems, fire alarm and detection system modifications, power and data cabling and accessories, mechanical plant supplies, preparation of circuit charts, attendance on main contractor and production of O & M manuals.

Option 1 £25,000.00

Option 2 £27,000:00

Option 3 £27,500:00

Note:

The following items are excluded:

Associated builders works

Professional fees

Any separate infrastructure charges

Any essential maintenance works that may be found to be necessary, nor for rectifying and inherent defects in the existing systems that would affect the operation of the proposed adaptation and new works.

Removal of any asbestos that may be found to be present

Additional costs associated with any sections of the proposed works being executed as separate phases or contracts

Part 4:

Cost Summary of Parts 1, 2 and 3

4.1 Proposal Cost Breakdown

Please Note: The below costs are estimates based on current market information. Estimates do not include Planning or Building Control fees. All NPS Professional Fees are calculated as Hub Agreement Contract. All Fees shown at lower rate between lump sum and percentage

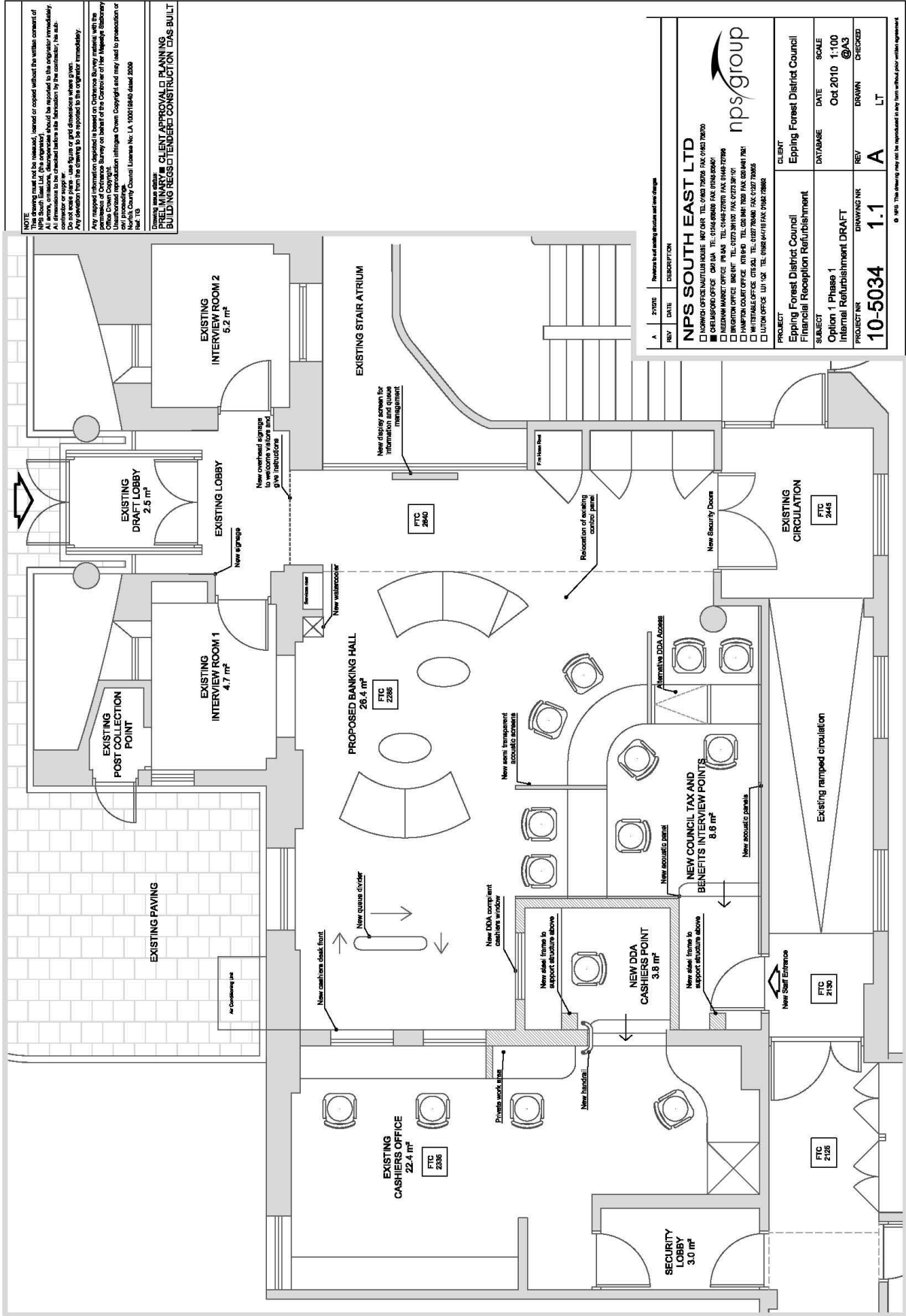
OPTION 1: Interior Refurbishment of Existing Facilities	
Demolition, site clearance and structural alterations as shown on plan	£11,500.00
Alterations and cosmetic refurbishment to the existing Lobby including new flooring, general decoration & signage as proposed floor plan	£1,500.00
Alterations, refurbishment and new furniture to existing Financial Reception. This includes structural alterations and cosmetic refurbishment as proposed floor plan	£54,500.00
Alterations and cosmetic refurbishment to the existing Cashiers Office, including new flooring and general decoration.	£10,000.00
Total Architectural Estimated Works for Option 1	£77,500.00
Mechanical Services Estimated Works for Option 1	£40,000.00
Electrical Services Estimated Works for Option 1	£25,000.00
TOTAL COST OF OPTION 1	£145,500.00
15% Builders Profits and Overheads	£21,375.00
5% Contingency	£7,275.00
TOTAL COST OF WORKS	£175,150.00
Estimated NPS Professional Fees (% fee calculated in accordance with the Hub Agreement)	£25,450.00
TOTAL	£200,600.00

OPTION 2: Interior Refurbishment and Extension of Existing Facilities	
Total cost of Option 1 Refurbishment Works	£77,500.00
Demolition and site clearance as shown on plan	£2,600.00
Alterations and cosmetic refurbishment to the existing Lobby	£500.00
Alterations and refurbishment to Interview Room 1 including acoustic panels	£5,200.00
Alterations to interview room 2 to form New post Room	£400.00
New doors between Finances reception and New Group and Interview Room 1	£1,500.00
Extension to provide Group Interview Facility	£35,000.00
Total Architectural Estimated Works for Option 1 & 2	£122,700.00
Mechanical Services Estimated Works for Option 1 & 2	£45,000.00
Electrical Services Estimated Works for Option 1 & 2	£27,000.00
TOTAL COST OF OPTION 1 & 2:	£194,700.00
15% Builders Profits and Overheads	£29,205.00
5% Contingency	£9,735.00
TOTAL COST OF WORKS	£233,640.00
Estimated NPS Professional Fees (% fee calculated in accordance with the Hub Agreement)	£33,626.84
TOTAL	£267,266.84

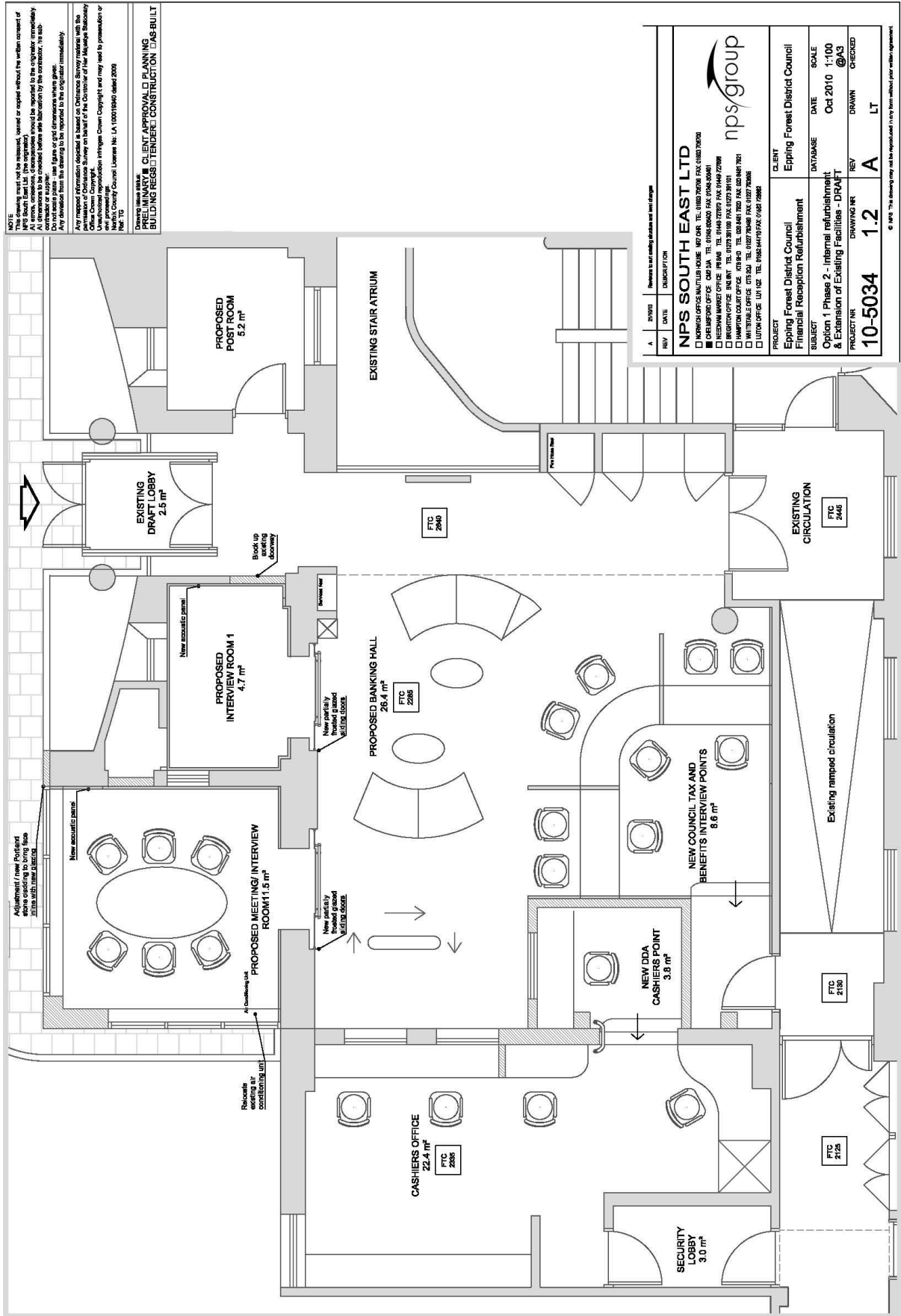
OPTION 3: Interior Refurbishment, Extension & Entrance Remodelling	
Total cost of Option 1 &2 Refurbishment & Extension Works	£122,700.00
Demolition and site clearance as shown on plan	£2,000.00
New External Glazing and sliding doors	£11,000.00
New Internal Doors	£1,000.00
External Roller Shutters	£6,000.00
New Information Screens	£3,000.00
Total Architectural Estimated Works for Option 1, 2 & 3	£145,700.00
Mechanical Services Estimated Works for Option 1, 2 & 3	£50,000.00
Electrical Services Estimated Works for Option 1, 2 & 3	£27,500.00
TOTAL COST OF OPTION 3	£223,200.00
15% Builders Profits and Overheads	£33,480.00
5% Contingency	£11,160.00
TOTAL COST OF WORKS	£267,840.00
Estimated NPS Professional Fees (% fee calculated in accordance with the Hub Agreement)	£34,415.86
TOTAL	£302,255.86

Appendix 1:

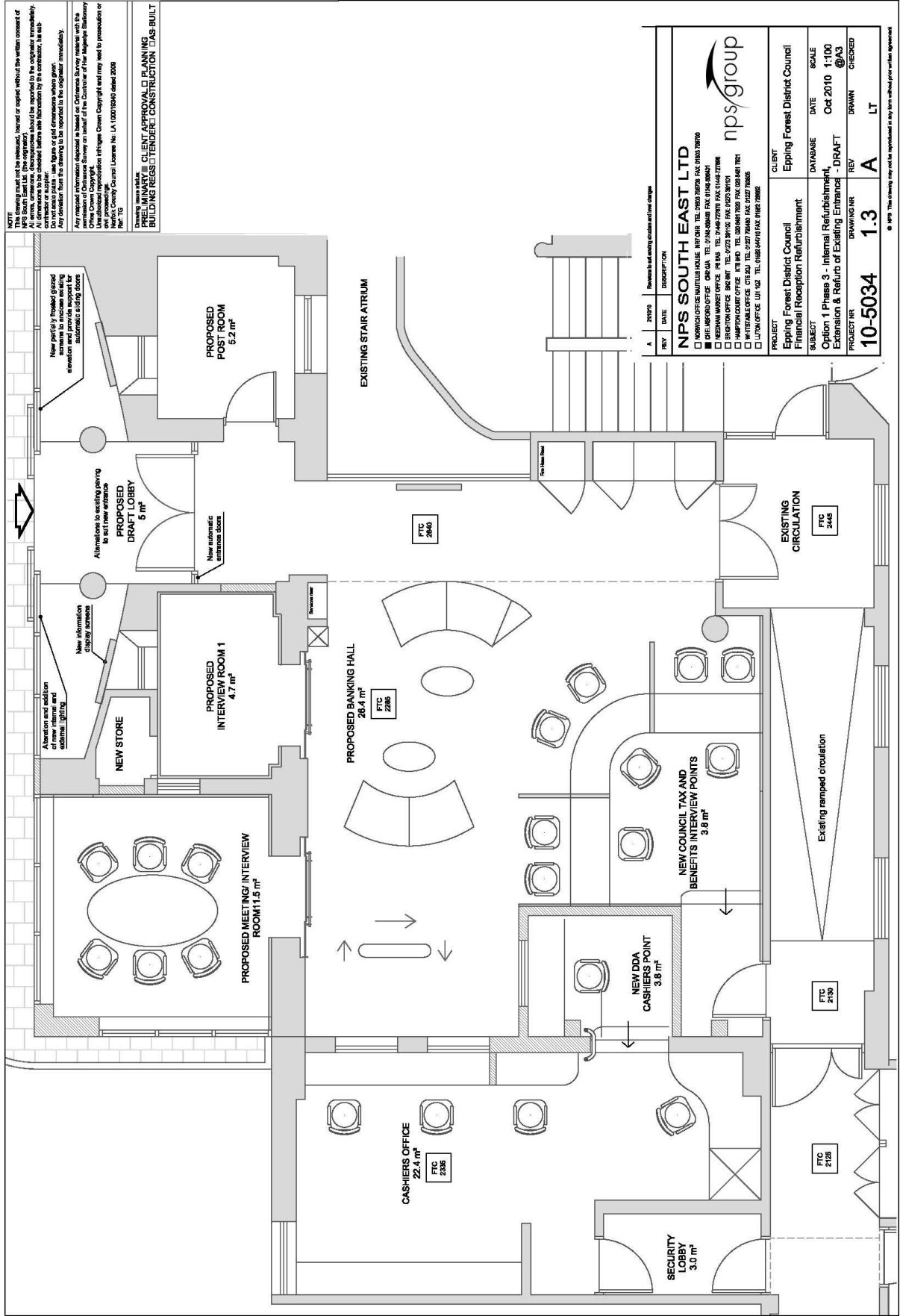
Superseded Option 1.1



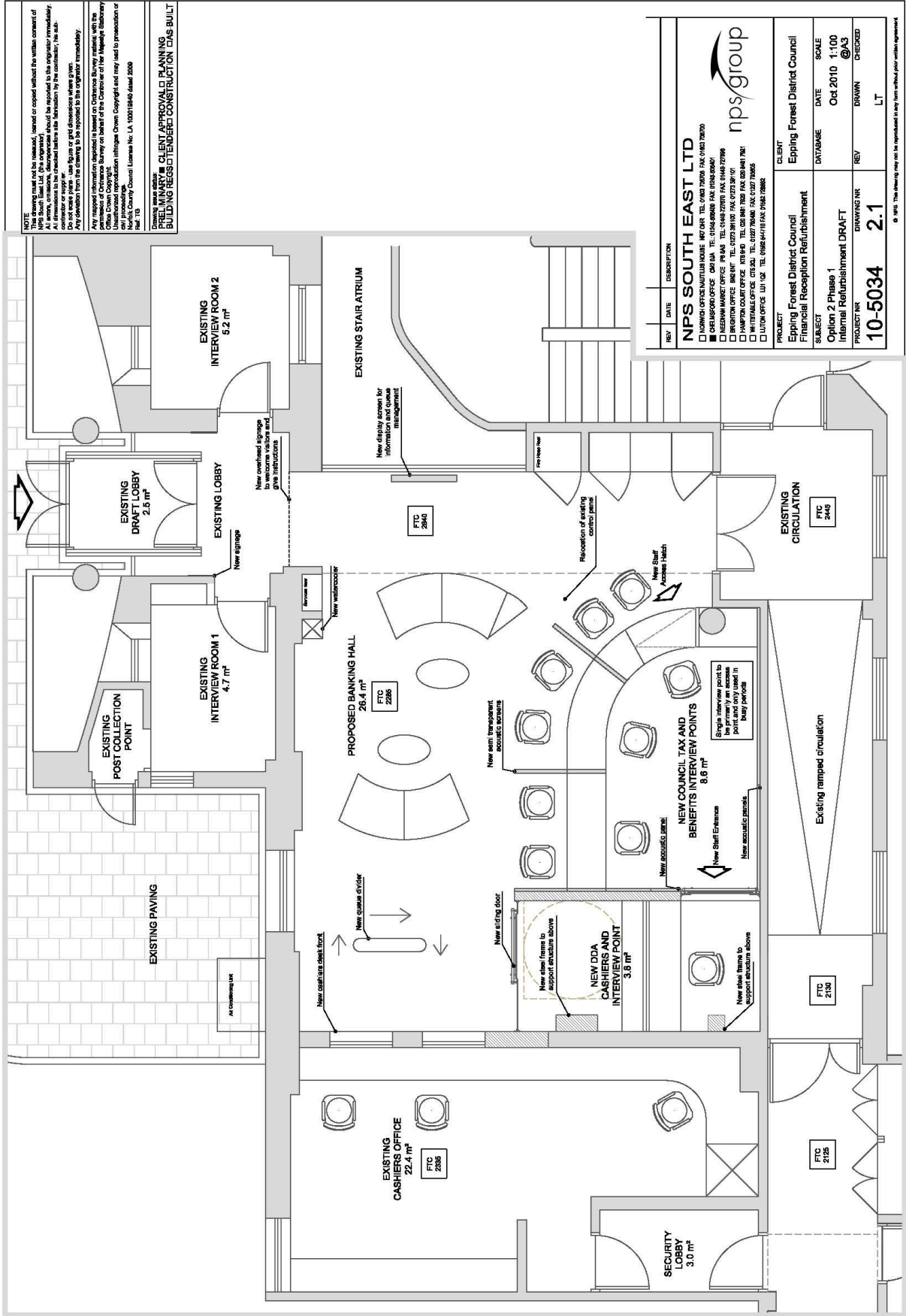
Superseded Option 1.2



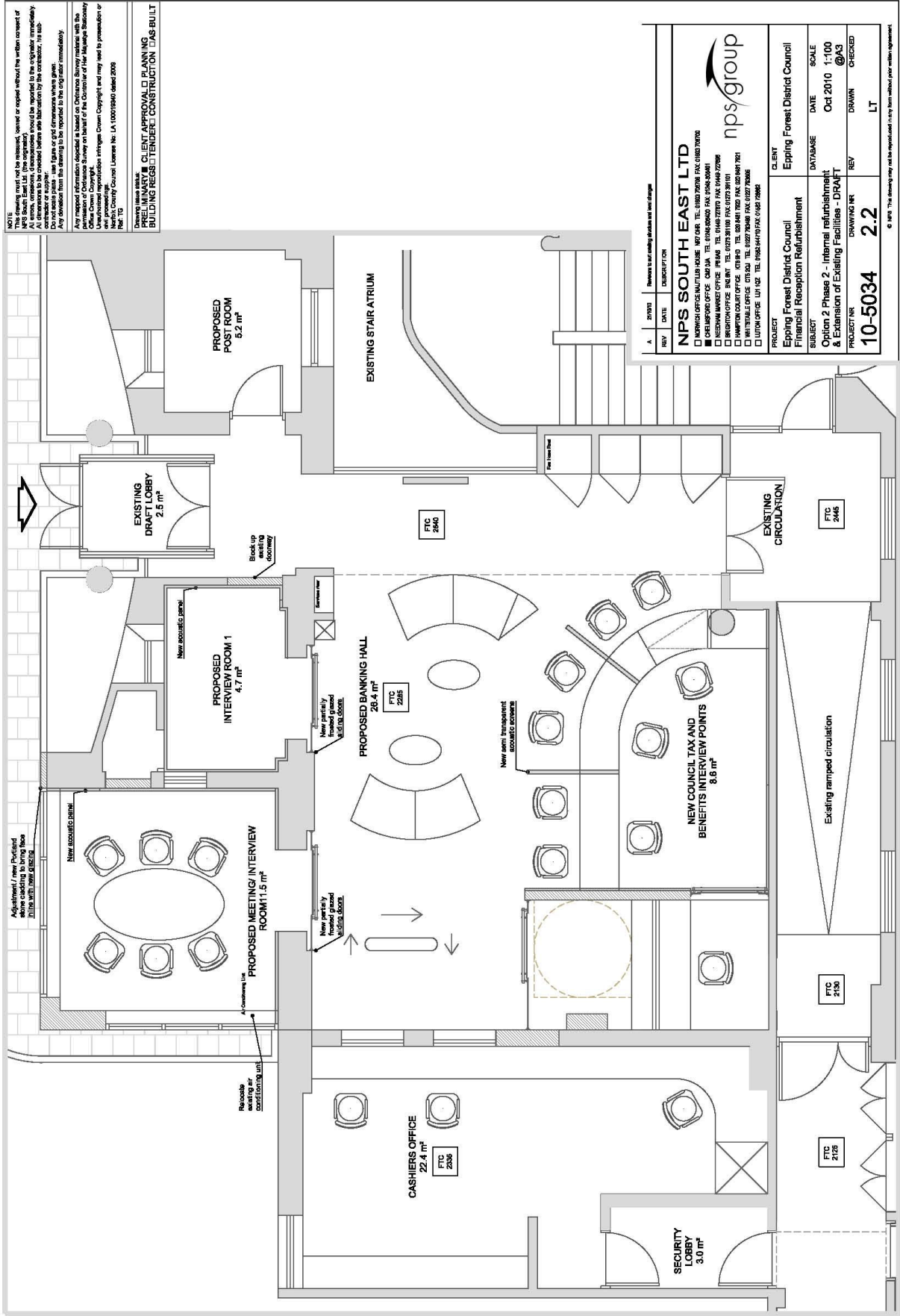
Superseded Option 1.3



Superseded Option 2.1



Superseded Option 2.2



NOTE
 Drawing may not be issued, altered or copied without the written consent of NPS South East Ltd (the contractor).
 All items shown are intended to be completed in accordance with the programme of works. It is the responsibility of the contractor to ensure that all items are completed in accordance with the programme of works.
 Any deviation from the drawings to be reported to the originator immediately.
 Any proposed alterations should be discussed with the originator in writing and approved in writing by the originator before any work is undertaken.
 The originator is not responsible for the construction of the building or any part thereof.
 The originator is not responsible for the design of the building or any part thereof.
 The originator is not responsible for the safety of the building or any part thereof.
 The originator is not responsible for the structural integrity of the building or any part thereof.
 The originator is not responsible for the fire safety of the building or any part thereof.
 The originator is not responsible for the health and safety of the building or any part thereof.
 The originator is not responsible for the environmental impact of the building or any part thereof.
 The originator is not responsible for the accessibility of the building or any part thereof.
 The originator is not responsible for the energy efficiency of the building or any part thereof.
 The originator is not responsible for the sustainability of the building or any part thereof.
 The originator is not responsible for the social impact of the building or any part thereof.
 The originator is not responsible for the economic impact of the building or any part thereof.
 The originator is not responsible for the cultural impact of the building or any part thereof.
 The originator is not responsible for the historical impact of the building or any part thereof.
 The originator is not responsible for the archaeological impact of the building or any part thereof.
 The originator is not responsible for the landscape impact of the building or any part thereof.
 The originator is not responsible for the visual impact of the building or any part thereof.
 The originator is not responsible for the noise impact of the building or any part thereof.
 The originator is not responsible for the air quality impact of the building or any part thereof.
 The originator is not responsible for the climate change impact of the building or any part thereof.
 The originator is not responsible for the biodiversity impact of the building or any part thereof.
 The originator is not responsible for the cumulative impact of the building or any part thereof.
 The originator is not responsible for the overall impact of the building or any part thereof.

PRELIMINARY CLIENT APPROVAL PLANNING AS-BUILT
 BUILDING REGS TENDER CONSTRUCTION

REV	DATE	DESCRIPTION
A		Revised to include additional set back drawings

NPS SOUTH EAST LTD
 NPS SOUTH EAST LTD
 CHESTERFIELD OFFICE: 107-109, TEL: 01273 720448 FAX: 01273 720449
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 BIRMINGHAM OFFICE: 107-109, TEL: 0121 7172000 FAX: 0121 7172001
 LONDON OFFICE: 107-109, TEL: 020 7461 7200 FAX: 020 7461 7201
 LUTON OFFICE: 107-109, TEL: 01525 536348 FAX: 01525 536349

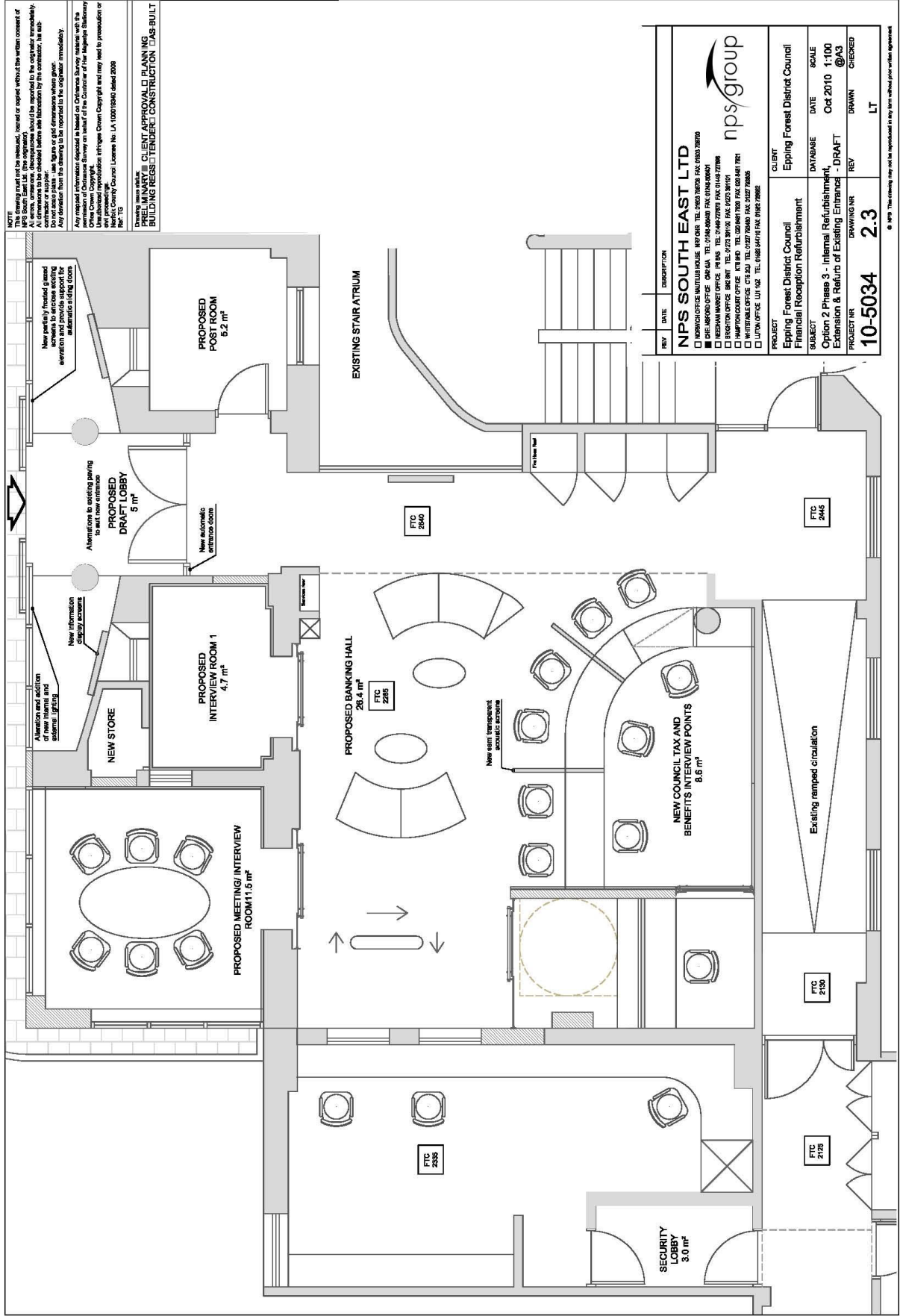
CLIENT Epping Forest District Council
PROJECT Epping Forest District Council
SUBJECT Financial Reception Refurbishment
DATE Oct 2010
SCALE 1:100
DRAWN @A3
CHECKED LT

PROJECT NR 10-5034
DRAWING NR 2.2

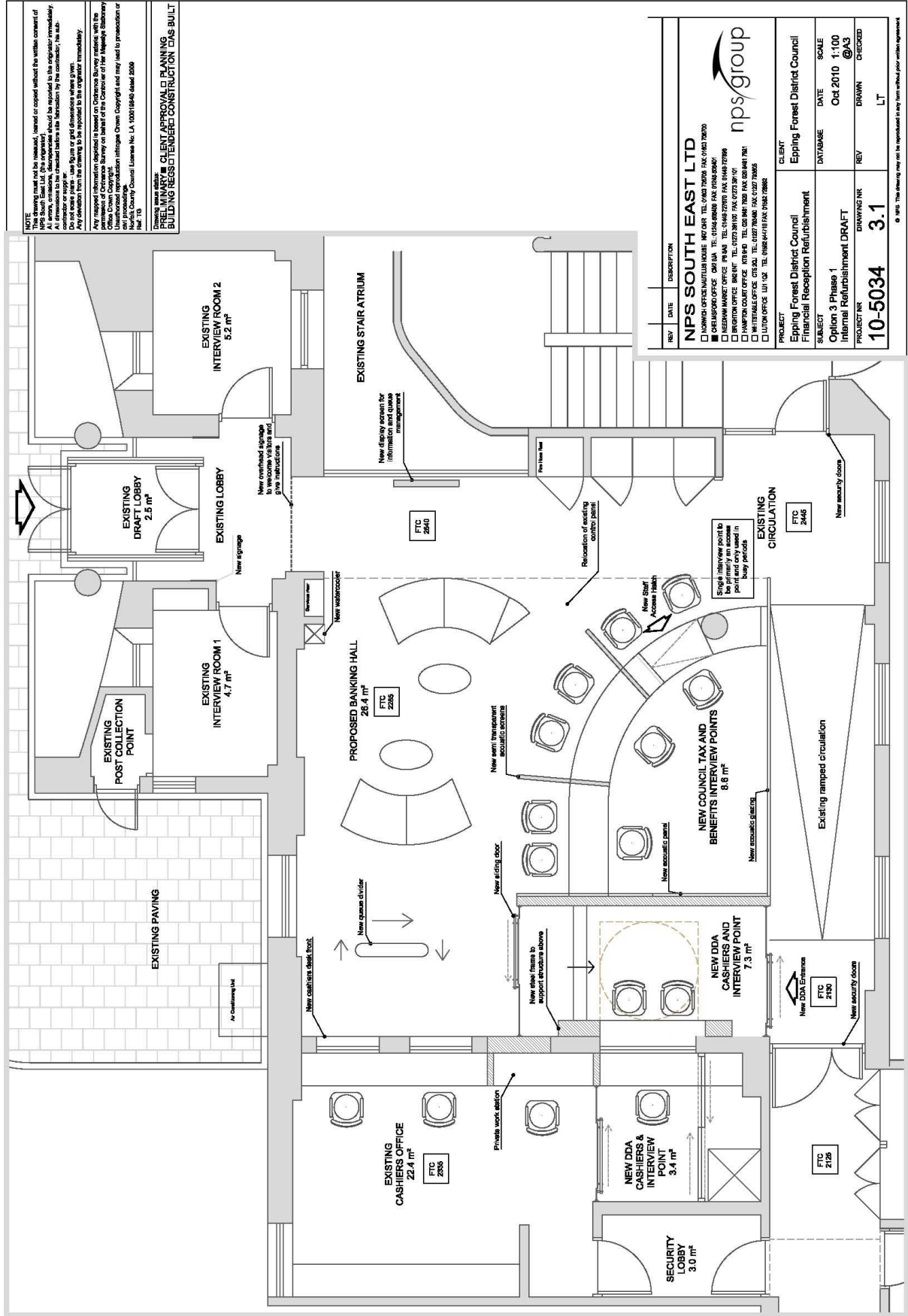
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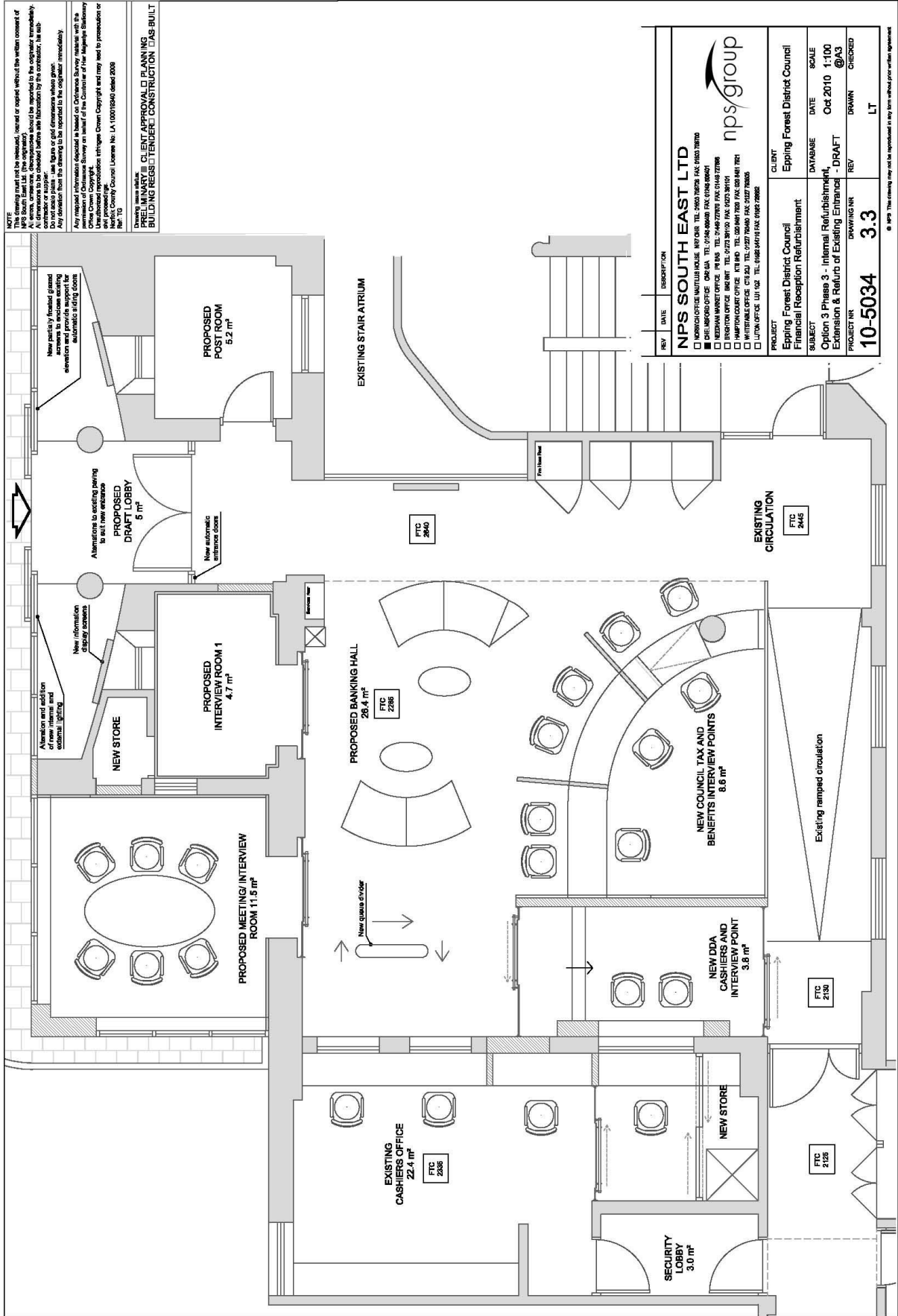
Superseded Option 2.3



Superseded Option 3.1



Superseded Option 3.3



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